

The EU Directive on Adequate Minimum Wages: Preliminary Assessment of Potential Impacts



Dominique Anxo

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Preface

The Directive on Adequate Minimum Wages in the European Union is to be transposed in national law by November 2024. While it has created much debate in Sweden, it is also seen as an important instrument for reducing inequalities in the EU. The stated objective of the directive is not only to ensure adequate minimum wage levels but also to strengthen collective bargaining.

The purpose of this report is to describe the different elements of the directive and to discuss its possible effects with the help of previous research. Taking an institutional and gender perspective, the author seeks to evaluate the extent to which the directive may constitute an effective instrument to improve the pay and working conditions of men and women in the EU. As far as gender equality is concerned, the author presents research that shows which factors are favourable to reducing the wage gap between women and men. Key elements in this respect are the level of trade union membership, the coverage rate of collective bargaining and the social partners' involvement in the production of labour market and social standards.

This SIEPS report is intended to provide a description and analysis of the Directive on Adequate Minimum Wages for decision-makers, practitioners, scholars and social partners. It is our hope that it will provide useful guidance for those who are interested in the labour market, equality, and the development of EU policy in this field.

Göran von Sydow
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Executive Summary

The Directive on Adequate Minimum Wages in the European Union, adopted by the European Parliament and the Council in October 2022 and to be transposed in national law by November 2024, is an important EU instrument aimed at revitalising Europe's social dimension. With its dual and interlinked objectives of ensuring adequate minimum wage levels and strengthening collective bargaining, the Directive acknowledges the positive role that social dialogue, collective bargaining, and minimum wage regulation play in promoting inclusive economic growth and social cohesion by limiting social exclusion and earnings inequalities.

It should be emphasised that the Directive does not impose obligations on Member States to introduce a statutory minimum wage or to declare collective agreements universally applicable when wage formation is carried out exclusively via collective agreements, as is the case in the Nordic countries, Austria, and Italy. Nor does the Directive aim to set a uniform minimum wage level across Europe, rather it specifies certain criteria, such as a statutory minimum wage corresponding to 60% of the median wage, to ensure that adequate minimum wages are set at national level.

For the 22 EU Member States which have statutory minimum wages, the explicit aims of the Directive regarding the setting of adequate statutory minimum wages are as follows: to achieve a decent standard of living; to reduce wage inequality; to help to close the gender wage gap; to reduce income disparities by lowering levels of in-work poverty, and to contribute to the promotion of social cohesion and upward social convergence within the EU. Another part of the directive deals with the issue of coverage and affects every Member State: the aim is to have 80% of workers covered by collective agreements.

Drawing on a review of the theoretical and empirical literature on minimum wages, the aim of this report is to analyse the potential socio-economic consequences of the Directive on Adequate Minimum Wages in the European Union. Taking an institutional and gender perspective, it assesses the extent to which the Directive may constitute an effective instrument to improve the pay and working conditions of men and women in Europe, reverse the trend in increasing inequalities, help close the gender wage-gap, and reduce gender income disparities by reducing in-work poverty.

The most recent comprehensive review on the employment impact of a moderate increase of statutory minimum wages found no significant detrimental employment effects, either for men or for women.¹ Overall, empirical studies

¹ An increase up to 60% of the median wage, see Dube (2019).

on the impact of minimum wages on wage distribution suggest that an increase in minimum wages significantly increases the wages of low-paid workers. This provides strong evidence that minimum wages, by compressing the wage structure at the bottom end of the wage distribution, reduce wage inequality, particularly for women, who are overrepresented among low-paid workers. Furthermore, a moderate increase in minimum wages not only appears to have an equalising effect on wages but also on the earnings distribution at the lower end of the wage distribution. The distributional impact of an increase in minimum wages on household income distribution is the subject of greater controversy. Nevertheless, recent evidence from the United States reveals positive distributional effects of a rise in minimum wages and a reduction of working poor households.

When it comes to the impact of minimum wages on the gender wage gap, a review of available empirical literature shows that increasing minimum wages does contribute to reducing pay disparities between men and women. This finding supports the objectives of the Directive and consistent with the European Commission's pre-assessment, which found that an uprating of minimum wages in the EU would decrease the gender wage gap on average by around 5%.

In order to assess the impact of the Directive's aim of increasing levels of collective bargaining, the report analyses the pattern of industrial relations systems across the EU. This analysis shows that systems with certain characteristics – high union density and collective bargaining coverage rates, balanced bargaining power between the two sides of industry, and centralised, coordinated, multi-employer collective bargaining systems – appear not only to favour better working conditions, and greater wage and gender equality, but also to deliver better labour market outcomes, economic growth and social cohesion. Labour market governance by the social partners and a developed (tripartite and/or bipartite) social dialogue process, as in the Nordic countries or in Belgium not only seems to better reconcile economic efficiency and social justice, but it also appears better adapted to provide an effective and fair response to the challenges linked to globalisation, demographic, technological change and the green transition. The report also shows that minimum wages tend to have stronger wage equality effects when combined with strong union and high collective bargaining coverage.

As far as gender equality and industrial relations systems are concerned, a review of available evidence shows that the higher wage floors found in countries with high union density, high coverage rate of collective bargaining and highly centralised wage setting raise women's relative pay and reduce the gender wage gap, since women are to a larger extent located at the bottom end of the wage distribution. Consistent with this evidence, the aim of the Directive (i.e. to increase the collective bargaining rate in all Member States to 80% and, for Member States with minimum wages, to actively involve the social partners in the setting of minimum levels) should lead to a reduction in the gender wage gap.

Furthermore, the analysis shows that the Nordic countries and Belgium, characterised by strong and independent social partners playing a crucial role in the production of labour market norms, wage formation, social protection and welfare state arrangements, score highest among EU countries on the Gender Equality Index. Not only is women's representation in national parliaments and political bodies among the highest in the world, their high level of trade union membership and involvement in collective bargaining/social dialogue helps put gender equality issues at the top of the political agenda. The strong feminisation of the labour force coupled with the significant modifications in the employment structure, from manufacturing to the services sector, means that, today, union density in the Nordic countries is significantly higher for women than for men. On the other hand, countries with fragmented systems, low union density, low coverage rates of collective bargaining, and less involvement of social partners in the production of labour market and social norms, score lowest on the Gender Equality Index among EU Member States.

In light of these findings, a priority should indeed be to strengthen the representativeness and autonomy of social partners and their institutional capacity to shape labour market and social norms. Such a policy strategy is in line with the aim of the Directive to promote social dialogue and collective bargaining at national level in order to ensure the setting of adequate minimum wage levels that enable a decent standard of living, reduce wage inequality, help close the gender wage gap, reduce the incidence of low-paid workers, and contribute to upward social convergence within the European Union.

If the policy objective of the EU, as illustrated by the adoption of the Directive, is to change direction and to move towards industrial relations systems characterised by high collective bargaining coverage rates and powerful and autonomous social partners playing a crucial role in the production of fair labour market norms, there is, however, a long way to go. This is especially true in Member States that have highly decentralised and non-coordinated, fragmented bargaining systems, such as the single-employer bargaining regimes prevalent in the majority of Central and Eastern European countries. These countries are characterised by both low union density and low coverage rates of collective bargaining, and they are currently far from achieving the target for collective bargaining coverage of 80%. Political and institutional support for upwards convergence in the EU towards a regime of industrial relations favouring a system of labour market governance based on autonomous and strong social partners and constructive social dialogue will be important. This will require effective monitoring, implementation, and financial and political support at both national and EU level.

The Directive on Adequate Minimum Wages in the European Union, in particular the uprating of statutory minimum wages, can thus contribute to improved pay and working conditions of men and women in the labour

market and reduce gender wage and earnings inequalities at the lower end of the wage distribution. It must, however, be stressed that gender differences in, for example, labour supply, should continue to be addressed with other policy instruments. Such instruments include the safeguarding and development of public services, the development of public childcare and elderly care facilities, the development of work-life balance arrangements, such as generous and flexible parental leave systems, the development of life-long learning facilities as well as the development of gender neutral fiscal and social protection systems.

1 Introduction

From the mid-1990s up to the early 2010s, the European Union's labour market strategy primarily took the form of a series of policy recommendations aimed at promoting labour market flexibility and strengthening work incentives, often at the detriment of the national and EU-level social dimension. During this period, a majority of EU Member States experienced a weakening of (national) social dialogue institutions and a decline in both union density and coverage rates of collective bargaining (Anxo 2021).² This neo-liberal agenda was most visible in the wake of the 2008 global financial crisis when the European Commission, the European Central Bank (ECB) and the International Monetary Fund (IMF) put pressure on some Member States, such as Greece, Portugal, and Ireland, to liberalise their industrial relations and wage bargaining systems and to limit downward wage rigidity by favouring *inter alia* a decentralization of collective bargaining systems, a greater use of non-standard forms of employment, and a weakening of trade-union bargaining power (European Commission 2012). As a result, the EU experienced an overall decline in the share of wages in national income, a rise in work-poverty and a significant increase in wage and income inequality (see Vaughan-Whitehead 2011).

This background can partly explain a renewed interest, since the second half of the 2010s, in EU employment and social policies, illustrated by the adoption of several EU directives aimed at strengthening the social dimension of the EU. The new narrative strongly emphasises the significance of interrelated and well-functioning employment and welfare systems as well as the crucial role of social dialogue and collective bargaining in favouring inclusive and fair economic development, social cohesion, and political stability. The Directive on Adequate Minimum Wages in the European Union³ (henceforth the Minimum Wage Directive, MWD, or the Directive) adopted in October 2022 by the European Parliament and the Council is a good illustration of a possible re-orientation of EU policy and constitutes one of the major recent EU initiatives aimed at reversing previous reforms and revitalising Europe's social dimension. The Minimum Wage Directive must be transposed in national law by November 2024.

In establishing a legal framework at the EU level, the Minimum Wage Directive's main objectives are: to promote adequate statutory minimum wages; to enhance effective access of workers to minimum wage protection; and to promote

² Collective bargaining coverage rate is the proportion of employees covered by collective (wage) agreements in force among employees with the right to bargain. Union density is the proportion of employees who are members of a trade union among all employees.

³ Directive (EU) 2022/2041 of the European Parliament and of the Council of 19 October 2022 on adequate minimum wages in the European Union, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022L2041>

collective bargaining on wage setting. It should be noted that the MWD does not impose obligations on Member States to introduce a statutory minimum wage or to declare collective agreements universally applicable when wage formation is carried out exclusively via collective agreements, as is the case in the Nordic countries, Austria, and Italy. Nor does the Directive aim to set a uniform minimum wage level across Europe, but rather it specifies certain criteria to ensure adequate minimum wages are set at national level. For EU Member States with statutory minimum wages, the explicit aims of the MWD regarding the setting of adequate statutory minimum wage are the following: to help workers achieve a decent standard of living; to reduce wage inequality; to help to close the gender wage gap; to reduce income disparities by lowering in-work poverty; and to promote social cohesion and upward social convergence within the EU. To guide their assessment of the adequacy of statutory minimum wages, the MWD stipulates that Member States shall use indicative reference values commonly used at international level and which define a decency threshold of the statutory minimum wage at the level of 60% of the gross median wage and/or 50% of the gross average wage.

To support the objective of promoting collective bargaining on wage setting, in early 2023 the European Commission issued a Communication on enhanced social dialogue between social partners at EU level,⁴ and this was accompanied by a Council Recommendation adopted in June 2023 on strengthening social dialogue and collective agreements at national level.⁵ The Council Recommendation aims to promote collective bargaining on wage-setting and working conditions with the explicit purpose of increasing collective bargaining coverage. It supports and complements the MWD requirement that Member States assist social partners to develop their capacity to engage in collective bargaining on wage setting and encourage constructive, meaningful and informed wage negotiations and social dialogue. More specifically, where the collective bargaining coverage rate does not reach at least 80% of wage earners, the MWD obliges Member States to put in place an enabling framework for collective bargaining and to establish an action plan after consultation with the social partners to promote collective bargaining in order to reach 80% coverage.

The main objective of this report is to assess the extent to which the MWD and the accompanying Council Recommendation on social dialogue can help strengthen social dialogue at the EU and national level and develop more inclusive industrial relations systems, thereby providing an important

⁴ Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee (COM(2023) 40 final): Strengthening social dialogue in the European Union: harnessing its full potential for managing fair transitions, <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52023DC0040>

⁵ Council Recommendation of 12 June 2023 on Strengthening Social Dialogue in the European Union, (C/2023/1389) https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C_202301389

counterweight to the growing wage inequalities which currently prevail across the EU. Drawing on a review of the existing theoretical literature and cross-national empirical evidence on the impact of minimum wage protection, as well as different industrial relations regimes on employment and wage inequalities, the report will assess the extent to which the recent initiatives of the Commission and the Council regarding wage formation and social dialogue can constitute an efficient instrument to reverse the trend in increasing inequalities and provide a counterweight to the prevailing and persistent gender inequalities in the labour market regarding pay and employment as well as to promote upwards social and economic convergence in Europe.

The report is structured as follows: Chapter 2 provides a detailed description of the MWD and identifies the EU Member States that do not currently fulfil the MWD minimum wage adequacy criteria or the collective bargaining coverage threshold of 80%. The chapter also contains a short resumé of a study carried out by the European Commission on the expected consequences of the MWD. Taking a historical perspective, Chapter 3 provides a review of the theoretical and empirical literature on the impact of minimum wages, as well as a gender sensitive assessment of the various potential impacts of the MWD on employment, wage structure and income distribution. Chapter 4 describes the main features and transformations of industrial relations systems and social dialogue in Europe during the last three decades, focusing on the development of social partners' representativeness as well as the capacity of the social partners to autonomously shape working conditions for men and women and influence public policies, particularly regarding their involvement in the setting of minimum wages. Special attention is given to the respective roles of public authorities and social partners in regulating the labour market and to the dominant types of collective bargaining systems. A cross-country analysis of the relationship between the prevailing type of industrial relation regimes and wage structure, wage inequality and gender equal opportunities is also provided. On the basis of this analysis, this chapter then examines the potential barriers to – and opportunities for – achieving the goal of 80% of collective bargaining rate enshrined in the MWD. The final chapter provides some concluding remarks.

2 The Directive on Adequate Minimum Wages

2.1 Context and Links with Other EU Initiatives

From the mid-1990s to the second half of the 2010s, European economic, employment and social policies were dominated by a neo-liberal economic policy agenda encouraging the reduction of public spending via fiscal consolidation measures, the control of inflation via the implementation of restrictive monetary policy and the reinforcement of the competitiveness of the EU Single Market via *inter alia* market deregulation (Vaughan-Whitehead 2011, 2013). During this period, the EU's overall labour market strategy primarily took the form of a series of policy recommendations aimed at promoting labour market flexibility and strengthening work incentives, often to the detriment of the national and EU social dimension. In several EU Member States, social protection reforms were implemented, such as reforms of unemployment and social insurance systems, leading to more restrictive eligibility criteria and lower income replacement rates. Several Member States introduced an in-work income tax credit system in order to increase work incentives and labour supply among low-income earners. Along the same lines, wage subsidies in the form of reduced social contributions were introduced in order to sustain and/or increase the demand of low-skilled/low-paid workers, in particular among countries with relatively high wage floors and/or statutory minimum wages such as France (Vaughan-Whitehead 2011, 2015).

Regarding labour market regulation, reforms of employment protection legislation were initiated in many EU Member States leading to increased precariousness of employment relationships, with a notable increase in atypical work (short-term contracts, temporary jobs, zero-hours contracts, bogus self-employment, involuntary part-time work). Technological changes, in particular the development of new information communication technologies and digitalisation, also fuelled the growth of new forms of atypical work such as freelance jobs, gig-work, and platform work, blurring the frontier between dependent- and self-employment (Vaughan-Whitehead et al. 2021). In addition to the above-mentioned “employment-friendly” structural reforms aimed at making the labour market more “dynamic” and flexible, in the wake of the 2008 global financial crisis the European Commission also encouraged institutional reforms aimed at adapting wage bargaining systems. Among these institutional reforms – the objective of which was to reduce downward wage rigidity – the Commission favoured a reduction in minimum wages, a decentralisation of collective bargaining systems and an overall weakening of trade unions’ wage-setting power (European Commission 2012). As a consequence of these

reforms and structural changes, we witnessed, during this period, a weakening in EU Member States of traditional collective bargaining and social dialogue institutions. A large majority of EU countries experienced a decline in both union density and coverage rates of collective bargaining resulting in a concomitant weakening of trade-union bargaining power, a decline in the wage share of national income, a rise in in-work poverty,⁶ and an upsurge in wage and income inequality (Anxo 2021; Keune 2021). The neo-liberal policy agenda at the EU level and in many EU Member States led to a growing distrust by citizens of EU institutions, labour market conflicts, social unrest, as well as contributed to the growth of extreme-right populist movements in Europe (Duque Gabriel et al. 2022).

On the other hand, since the second half of the 2010s we have witnessed a possible re-orientation of EU employment and social policy illustrated by the adoption of several EU directives aimed at strengthening the social dimension of the Union. The new narrative strongly emphasises the significance of interrelated and well-functioning employment and welfare systems as well as the crucial role of social dialogue and collective bargaining in favouring inclusive labour markets for men and women, fair economic development, social cohesion and political stability. The new Directive on Adequate Minimum Wages in the European Union, with its objectives of ensuring adequate minimum wage levels enabling a decent standard of living and strengthening collective bargaining, constitutes one of the major EU initiatives aimed at revitalising Europe's social dimension.

Previous EU initiatives have also constituted important reference points and milestones in the drafting and adoption of the Minimum Wage Directive. These include the European Parliament, the Council and the Commission's adoption of the European Pillar of Social Rights (EPSR) at the Social Summit for Fair Jobs and Growth in Gothenburg in November 2017.⁷ The EPSR contains 20 key principles to support fair and well-functioning employment and social protection systems. The principles cover the areas of the labour market, social protection, essential services, education and equal opportunities. Besides promoting better performing, more inclusive economies and more equitable, cohesive and resilient societies, a main objective of the EPSR was also to stimulate a renewed process of upwards convergence towards better working and living conditions across the European Union. The EPSR reaffirms the fundamental principles and rights of the 1961 Charter of Fundamental Rights of the European Union as amended in 1996 (in particular Article 2 on the right to just conditions of work,

⁶ The working poor are defined and measured as those individuals who have been mainly working at least 7 months during the reference year (either in employment or self-employment) and whose household equivalised disposable income is below 60% of the median disposable income in the country in question.

⁷ European Pillar of Social Rights, 2017 <https://op.europa.eu/en/publication-detail/-/publication/e57715d3-f4ee-11e7-be11-01aa75ed71a1/language-en/format-PDF/source-search>

Article 4 regarding the right to a fair remuneration and Article 6 the right to bargain collectively) and the relevant sections of the Treaty on the Functioning of the European Union (in particular Article 152, which recognises the role of social partners and facilitates social dialogue, Article 153 on working conditions, and Article 157 on equal pay for men and women for equal work).

Regarding fair working conditions, fair pay, and gender equality the EPSR states that

- Women and men have the right to equal pay for work of equal value. (Chapter 1, Principle 2)
- Workers have the right to fair wages that provide for a decent standard of living. (Chapter II, Principle 6)
- Adequate minimum wages shall be ensured, in a way that provide for the satisfaction of the needs of the worker and his / her family in the light of national economic and social conditions, whilst safeguarding access to employment and incentives to seek work. (ibid.)
- All wages shall be set in a transparent and predictable way according to national practices and respecting the autonomy of the social partners. (ibid.)

The EPSR underlines the fundamental role the social partners play in reinforcing social rights and enhancing sustainable and inclusive growth. The EPSR also underlines the crucial role they have in implementing many of the EPSR's principles, in accordance with their degree of autonomy in negotiating and concluding agreements and the right to collective bargaining and collective action. Chapter II, Principle 8 states that:

- The social partners shall be consulted on the design and implementation of economic, employment and social policies according to national practices. They shall be encouraged to negotiate and conclude collective agreements in matters relevant to them, while respecting their autonomy and the right to collective action.
- Workers or their representatives have the right to be informed and consulted in good time on matters relevant to them, in particular on the transfer, restructuring and merger of undertakings and on collective redundancies.
- Support for increased capacity of social partners to promote social dialogue shall be encouraged.

It should be remembered that the EPSR does not contain any new enforceable “rights” but rather a set of fundamental principles.

Four years later, at the EU Social Summit in Porto in May 2021, the European Commission and the European Parliament, together with the major European employers' associations and trade unions, declared a strong “social commitment” to the implementation of the EPSR, which as we have seen explicitly requires

decent working conditions and fair pay for all.⁸ Within the framework of an Action Plan (see below), the EU Commission is using a set of common social and economic indicators, aimed at monitoring the implementation of the three chapters of the EPSR – namely, equal opportunities and access to the labour market, fair working conditions and social protection and inclusion.

The 2021 Porto Agreement constitutes a further illustration of the re-orientation of EU policy during the last decade aiming at reinforcing the social dimension of the EU. In tandem, supporting these developments, the current President of the European Commission, Ursula von der Leyen and Commissioner for Jobs and Social Rights Nicolas Schmit instigated a series of legislative initiatives in the field of employment and social policy. Among these are the EU directive ((EU) 2019/1152) on Transparent and Predictable Working Conditions in the European Union⁹ adopted in June 2019 and the Action Plan for the implementation of the EPSR adopted in 2021 (/SOC/679-EESC-2021),¹⁰ which contains several initiatives and concrete legislative projects. However, the Commission's most far-reaching and important labour policy initiative was the proposal for a *European Directive on Adequate Minimum Wages in the European Union*, which was published in October 2020. This directive is the object of this report and will be described in more detail in the next section.

As mentioned by Sjödin (2022), it is interesting to note that the proposal was put forward after it had been established that the European social partners would not be able to reach an agreement within the scope of the European social dialogue leading to a framework agreement to be implemented through a Council Directive, as had happened, for example, with Directive 97/81/EC concerning the Framework Agreement on part-time work concluded by UNICE, CEEP and the ETUC in December 1997,¹¹ Directive 1999/70/EC concerning the Framework Agreement on Fixed-term Work concluded by social partners in 1999¹² or Directive 2010/18/EU implementing the revised Framework Agreement on Parental Leave concluded by EU Social Partners in 2010.¹³

⁸ Porto Social Summit, Porto Social Commitment, 7 May 2021, <https://www.consilium.europa.eu/en/press/press-releases/2021/05/08/the-porto-declaration/>

⁹ Directive (EU) 2019/1152 on Transparent and Predictable Working Conditions in the European Union, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019L1152>

¹⁰ Action plan on the implementation of the European Pillar of Social Rights, (/SOC/679-EESC-2021), <https://www.eesc.europa.eu/en/our-work/opinions-information-reports/opinions/action-plan-implementation-european-pillar-social-rights>.

¹¹ Council Directive 97/81/EC of 15 December 1997 concerning the Framework Agreement on part-time work concluded by UNICE, CEEP and the ETUC, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31997L0081>

¹² Council Directive 1999/70/EC of 28 June 1999 concerning the framework agreement on fixed-term work concluded by ETUC, UNICE and CEEP, <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:31999L0070>

¹³ Council Directive 2010/18/EU implementing the revised Framework Agreement on parental leave concluded by BUSINESSEUROPE, UEAPME, CEEP and ETUC and repealing Directive 96/34/EC, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32010L0018>

One contextual element to consider, alongside the Pillar of Social Rights and the Porto Declaration, is the Charter of Fundamental Rights of the European Union (2000, gained legal force in 2009): the 2020 proposal for a directive on adequate minimum wages was explicitly understood as supporting the implementation of Article 31(2) of the Charter,¹⁴ which states that every worker has the “right to working conditions which respect his or her health, safety and dignity,” and Article 4 (§ 1 & 3) on fair remuneration,¹⁵ as well as the aforementioned Principle 6 of the EPSR.

Another element is increased action on gender inequality. Following the adoption of the Directive, and in order to further combat pay discrimination and help close the gender pay gap, the EU also adopted new rules on pay transparency, the EU Directive (EU) 2023/970 to strengthen the application of the principle of equal pay for equal work or work of equal value between men and women through pay transparency and enforcement mechanisms.¹⁶ Under the new rules, EU companies with at least 150 employees will be required to share information on salaries and take action if their gender wage gap exceeds 5%. This directive also includes provisions on compensation for victims of pay discrimination and penalties, including fines, for employers who break the rules. EU Member States have up to three years to transpose the (EU) 2023/970 Directive and to adapt their national legislation accordingly. Two years after the transposition deadline, the requirement to report gender pay information every three years will be extended to companies employing over 100 workers.

A third contextual element is the work to bolster “social dialogue” at EU level – “consultations, discussions, negotiations, agreements and joint actions” by representatives of employers and employees.¹⁷ One important aspect of the Minimum Wage Directive is to strengthen social dialogue and to promote collective bargaining in the European Union (see section 2.2). To support this objective, in early 2023 a Communication on enhanced social dialogue between social partners at EU level (COM(2023) 40 final)¹⁸ was adopted by the European

¹⁴ Charter of Fundamental Rights of The European Union, (2012/C 326/02), <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:12012P/TXT>

¹⁵ Article 4 on Fair remuneration: § 1 to recognise the right of workers to a remuneration such as will give them and their families a decent standard of living § 3 to recognise the right of men and women workers to equal pay for work of equal value.

¹⁶ Directive (EU) 2023/970 to Strengthen the Application of the Principle of Equal Pay for Equal Work or Work of Equal Value between Men and Women through Pay transparency and Enforcement mechanisms, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32023L0970>

¹⁷ Definition given in the “Val Duchesse Social Partner Summit – Tripartite Declaration for a thriving European Social Dialogue” <https://ec.europa.eu/social/main.jsp?catId=1632&langId=en>

¹⁸ Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee (COM(2023) 40 final): Strengthening social dialogue in the European Union: harnessing its full potential for managing fair transitions, <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52023DC0040>

Commission. The Communication was accompanied by a proposal of a Council Recommendation setting out how EU countries can strengthen social dialogue and collective agreements at national level.¹⁹ The Council Recommendation was adopted in June 2023. The primary aim of the Council Recommendation is to support Member States in promoting social dialogue and collective bargaining at national level by addressing three main elements: consultations of social partners on the design and implementation of economic, employment and social policies; encouraging social partners to negotiate and conclude collective agreements while respecting their autonomy and the right to collective action; and fostering support for increased capacity of social partners.

As stressed by Schulten and Müller (2021), the EPSR action plan and the recently adopted Minimum Wage Directive ((EU) 2022/2041), along with the Transparency Directive ((EU) 2019/1152) and the Equal Pay Directive ((EU) 2023/970) constitute therefore a paradigm shift by the European Commission regarding the acknowledgment of the positive role played by bipartite/tripartite social dialogue, labour market institutions such as collective bargaining systems, and employment and minimum wage regulation in fostering the development of an inclusive labour market and promoting social cohesion and economic growth.

2.2 Content and Objectives of the Directive

On 19 October 2022, the European Parliament and the Council adopted the Directive (EU 2022/2041) on Adequate Minimum Wages in the European Union. It must be transposed in national law by November 2024.

The legal basis for the Commission's proposal is Articles 153 § 1(b) and 151 § (1) of the Treaty on the Functioning of the European Union (TFEU), which state that one of the objectives of the Union and its Member States is to improve the living and working conditions, and to do this the EU may adopt directives setting out minimum requirements regarding those conditions.

The preamble cites Article 31 of the Charter of Fundamental Rights of the European Union, which “provides for the right of every worker to have working conditions respecting their health, safety and dignity”; Article 27 and Article 28 on “the right of workers and employers, or their respective organisations, to negotiate and conclude collective agreements at the appropriate levels”, and Article 23 which “provides for the right to equality between women and men in all areas, including employment, work and pay”. It also cites the European Social Charter (ESC – a Council of Europe treaty on fundamental social and economic rights), which “establishes that all workers have the right to just conditions of work” and “recognises the right of all workers to a fair remuneration sufficient for a decent standard of living for themselves and their families [and] the role of

¹⁹ Council Recommendation of 12 June 2023 on Strengthening Social Dialogue in the European Union, (C/2023/1389) https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C_202301389

freely concluded collective agreements, as well as of statutory minimum wage-setting mechanisms, to ensure the effective exercise of this right, and the right of all workers and employers to organise in local, national and international organisations and to bargain collectively”.

It goes on to cite Chapter II of the European Pillar of Social Rights (EPSR) which “establishes a set of principles to serve as a guide towards ensuring fair working conditions”, and makes particular reference to Principle 6 which “reaffirms workers’ right to fair wages that provide for a decent standard of living [...] provides that adequate minimum wages are to be ensured, in a way that provides for the satisfaction of worker’s needs and his or her family in light of national economic and social conditions” and “recalls that in-work poverty is to be prevented and that all wages are to be set in a transparent and predictable way, according to national practices and respecting the autonomy of the social partners.” The preamble also cites Principle 8 which “provides that the social partners are to be consulted on the design and implementation of economic, employment and social policies according to national practices and that they are to be encouraged to negotiate and conclude agreements in matters relevant to them, while respecting their autonomy and the right to collective action.”

In accordance with the aforementioned documents and legal frameworks, the MWD has as its primary objectives to improve workers’ living and working conditions; reduce wage inequality; help to close the gender wage gap; reduce income disparities by lowering in-work poverty; and contribute to promoting social cohesion and upward social convergence within the EU. In order to achieve these objectives, Chapter I (Articles 1–4) of the MWD contains general provisions and states that the Directive sets out a framework for setting adequate statutory minimum wages (Article 1 § 1(a)) and to promote effective access of workers to minimum wage protection rights, regardless of whether minimum wages are set by national law or collective agreements (Article 1 § 1(c)). Article 1 § 2 specifies also that the MWD should not affect the autonomy of the social partners, as well as their right to negotiate and conclude collective agreements. Furthermore, Article 1 § 4(a) & § 4(b)) stipulates that nothing in this Directive shall be construed as imposing an obligation on any Member State where wage formation is ensured exclusively via collective agreements, to introduce a statutory minimum wage; or to declare any collective agreement universally applicable. The MWD applies to workers in the EU who have an employment contract or employment relationship as defined by law, collective agreements or practice in force in each Member State.

Nothing in the MWD therefore should be interpreted as an obligation for Member States lacking statutory minimum wages, such as Austria, Denmark, Finland, Italy or Sweden, where wage floors are determined by collective agreement, to introduce a statutory minimum wage. In other words, the Directive does not intend to affect Member States’ decisions regarding whether minimum wage protection shall be regulated by law or collective agreements (Sjodin 2022; SOU 2023).

Chapter II Article 5 § 1 of the Directive states that those Member States which do have statutory minimum wages “shall” (i.e. they must) “establish the necessary procedures for the setting and updating of statutory minimum wages”. It specifies that “such setting and updating shall be guided by criteria set to contribute to their adequacy” and as its aim should have the objectives of the MWD, namely achieving a decent standard of living, reducing wage and income inequalities, as well as promoting an upward social convergence.

According to the Directive, SMW are considered to be adequate if they are fair in relation to the wage distribution in the relevant Member State and if they provide a decent standard of living for workers based on a full-time employment relationship. According to Article 5 § 2, the criteria for adequate minimum wage shall at least include the following a) the purchasing power of statutory minimum wages, considering the cost-of-living b) the general level of wages and their distribution; c) the growth rate of wages; d) long-term national productivity levels and developments. In Article 5 § 3, the Directive stipulates that Member States “shall use indicative reference values to guide their assessment of adequacy of statutory minimum wages”. It further states that they “may use reference values commonly used at international level” and mentions the so-called Kaitz index, which defines a decency threshold for statutory minimum wages at the level of 60% of the gross median and/or 50% of the gross average wage. The Directive states that, alternatively or additionally, the adequacy assessment might be based on reference values associated to indicators used at national level, such as the comparison of the net minimum wage with the poverty threshold and the purchasing power of minimum wages (these two are mentioned in the preamble).

Article 10 § 1 states that Member States shall “take appropriate measures to ensure that effective tools are in place” to collect the data needed for the European Commission and others to monitor minimum wage protection in the EU. In particular, Member States should collect and provide data on the rate and development of collective bargaining coverage. For Member States with statutory minimum wages, they should provide data on the level and the share of workers covered. For Member States with minimum wage protection provided only by collective agreements, data should be provided on collective agreed wage floors for low-wage earners (or an estimate thereof) and on the level of wages paid to workers not covered by collective agreements and its relation to the level of wages paid to workers covered by collective agreements (Article 10 § 2).

Article 7 (a-c) specifies that the Member States shall take the necessary measures to involve the social partners in the setting and updating of statutory minimum wages, in particular concerning the selection and application of criteria for the determination of the level of the statutory minimum wage, the indicative reference values for the assessment of the adequacy of statutory minimum wage, and the timely updating of statutory minimum wages.

Article 9 states that, in accordance with EU directives relating to public procurement (for instance 2014/24/EU),²⁰ Member States shall take appropriate measures to ensure that, in the awarding and performance of public procurement or concession contracts, economic operators and their subcontractors comply with the applicable obligations set out in social and labour law or collective agreements regarding wages, the right to organize and collective bargaining on wage setting. The MWD states explicitly that it does not create any additional obligations in relation to the EU directives in the field of procurement (SOU 2023). It should be noted that the obligations in the EU procurement directives cover all employment conditions and not only wages.

In order to promote collective bargaining on wage setting with the explicit purpose of increasing collective bargaining coverage, the MWD requires that Member States take action to support social partners to develop their capacity to engage in collective bargaining on wage setting, and to encourage constructive, meaningful and informed wage negotiations (Article 4 § 1 (a-d)). The Directive also asks Member States where collective bargaining coverage does not reach at least 80% of wage earners to put in place an enabling framework for collective bargaining and to establish, after consultation with the social partners, an Action Plan to promote collective bargaining. The Action Plan shall set out a clear timeline and concrete measures to progressively increase collective bargaining coverage rates. The Member State shall review the Action Plan regularly (at least every five years) and update it if needed. The Action Plan and any update thereof shall be made public and notified to the Commission (Article 4 § 2).

At the EU level, minimum wage policies will be subject to multilateral surveillance within the regular cycle of economic policy coordination in the EU, i.e. within the framework of the European Semester. The European Semester may ultimately lead to the adoption of Country Specific Recommendations (CSRs) with suggestions and guidance for national minimum wage setting in selected countries (see European Commission 2020a). Progress towards achieving the objectives of the MWD will be monitored by a series of core indicators (a benchmarking framework). In order to facilitate this monitoring, Member States shall develop effective data collection tools to monitor the coverage and adequacy of statutory minimum wages (SMWs). The proposed indicators for monitoring the implementation of the initiative for countries with SMW are the level of statutory minimum wages (gross monthly figures), the share of workers covered by SMW, and the rate of collective bargaining coverage. The five EU Member States with minimum wages determined by collective agreements shall provide the following statistics: the distribution in deciles of collective agreed wage floors weighted by the share of covered workers, the level and adequacy of

²⁰ Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC Text with EEA relevance, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0024>

wages for workers not having minimum wage protection provided by collective agreements and the collective bargaining coverage rate. These statistics will be provided and disaggregated by gender, age group, and sector. According to Article 15 of the MWD, the Commission shall, by November 2029 and after consulting the Member States and the social partners at Union level, conduct an evaluation providing the basis for a review on the effective implementation of the Directive. The Commission shall thereafter submit this review in the form of a report to the European Parliament and the Council.

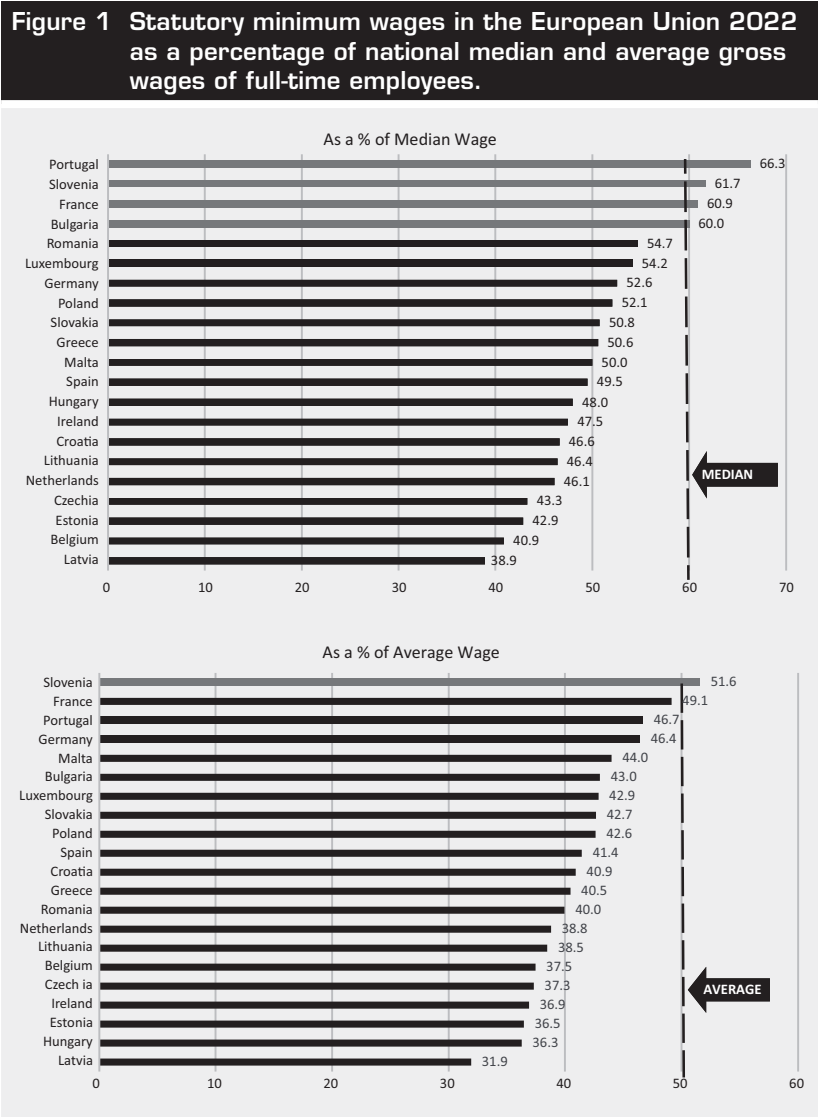
2.3 Where Will the Directive (and the Recommendation on Social Dialogue) Have the Most Impact?

As previously mentioned, the Minimum Wage Directive should not be interpreted as obliging Member States that lack statutory minimum wages to introduce them. Nor should the Directive be interpreted either as an attempt to set a uniform minimum wage level across Europe, but rather it specifies certain criteria to ensure adequate minimum wages at national level. According to the MWD, minimum wages are considered adequate when they are fair vis-a-vis the wages of other workers and when they provide for a decent standard of living. Among the current 27 Member States, 22 have statutory minimum wages. In the other five Member States (Austria, Denmark, Finland, Italy and Sweden) minimum wage protection (wage floors) is essentially provided by collective agreements, most often at the industry level. In other words, the provisions in the MWD concerning the adequacy of minimum wages apply only to the 22 Member States with statutory minimum wages and, among these Member States, only to those that do not fulfil the MWD's indicative reference value, namely a decency threshold value of 60% of median gross wage and/or the 50% of the average gross wage.

An open question in the MWD concerns the Member State's choice of decency threshold criteria, and whether one or both threshold criteria should apply conjointly (median *and/or* average gross wage). As shown by the upper panel of Figure 1, if we use as a reference value the traditional Kaitz index based on median gross wage, only four Member States with Statutory Minimum Wages fulfilled, in 2022, the adequacy criteria regarding the level of minimum wage, namely Portugal, Slovenia, France and Bulgaria. If we use instead the average gross wage criteria or the double decency threshold, only Slovenia fulfilled the criteria of adequate statutory minimum wage level in 2022.²¹

²¹ According to the MWD, SMW are considered adequate if they are fair in relation to the wage distribution in the relevant Member State, adequacy criteria in accordance with the Kaitz index. But based solely on this relative criteria, the SMW at this level does not necessarily imply a decent standard of living for workers, particularly in low-wage EU Member States such as Bulgaria and Romania that (almost) fulfil the Kaitz index. The incidence of low-paid workers is significantly higher in Bulgaria (21%) and Romania (20.0%) compared to the EU27 average (15.2%), see Chapter 3, Figure 3. In-work poverty in 2022 was also above the EU27 average (8.5%) in these two countries: 15.3% in Romania and 9.7% in Bulgaria (see OECD 2023a).

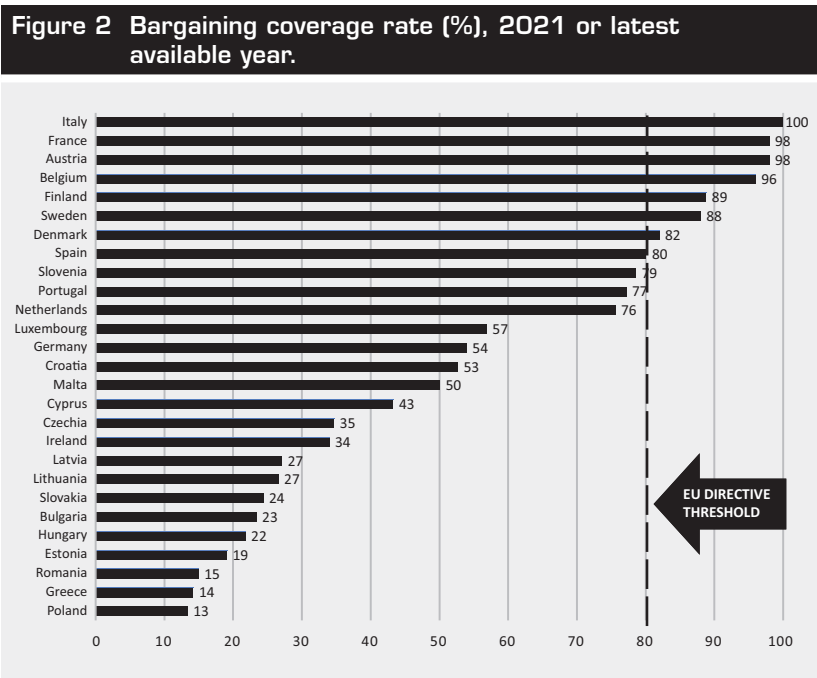
In other words, and independently of the reference value used, a majority of Member States with statutory minimum wages did not fulfil the decency threshold criteria in 2022. According to the MWD, these Member States must therefore establish the necessary procedures for an updating/upgrading of their SMW, principally by increasing the level of minimum wage to attain the reference values. As shown by Figure 1, the increase in statutory, hourly minimum wage needed to reach the decency threshold target can be substantial, particularly in



Source: OECD Earnings Database (2023) supplemented by Eurostat (2023) for Bulgaria.

Baltic and Central and Eastern European countries, but also in Belgium and the Netherlands (Müller 2023; Müller et al. 2023).²²

As noted previously, the Directive sets the objective of strengthening collective bargaining on wage setting with the explicit purpose of raising collective bargaining coverage, which requires that Member States take action to support social partners to develop their capacity to engage in collective bargaining on wage setting, and to encourage constructive, meaningful, and informed wage negotiations.



Note: Collective bargaining coverage is defined as the share of workers covered by collective agreements, calculated as the ratio of the number of workers covered by collective agreements divided by the total number of wage earners.

Source: ICTWSS database (OECD/AIAS, 2023) and own calculations.

As shown by Figure 2, in 2021, only eight Member States fulfilled the bargaining coverage rate of 80% enshrined in the Directive. Only three Member States with SMW (France, Belgium and Spain) reached the threshold. All the Member States with wage floors regulated by collective agreements (Austria, Italy and the three Nordic countries) had a bargaining coverage rate above the MWD’s

²² To illustrate: taking the median wage criteria Latvia and Belgium should increase their SMW by respectively 21 and 19 percentage points or an increase of respectively 54% and 46%. If we take Germany or Romania instead the required increase of SMW to fulfil the criteria is respectively 7 and 5 percentage points, or an increase by respectively 13% and 9%.

threshold. A majority of Central and Eastern European Member States and all Baltic countries had a bargaining coverage rate under 30%. As of 2022, 19 Member States would therefore have to establish an action plan to promote collective bargaining and implement concrete measures to progressively increase collective bargaining coverage rates.²³

2.4 Expected Impact of the Directive

In order to analyse the potential implications and impacts of the introduction of the MWD, the European Commission carried out two impact assessments, the first one accompanying the Commission's proposal (European Commission 2020a), and a second, a year later, which used EUROMOD, a tax-benefit microsimulation model for the European Union (European Commission 2021).

We will in this section limit our review to the main results of the second pre-assessment carried out by the Commission. This technical report provides estimates of the labour market and social impacts of hypothetical increases in statutory minimum wages. These hypothetical increases comply with the two previously described highest reference values regarding the adequacy of minimum wages, namely 50% of the national gross average wage or 60% of the gross median wage. Using the microsimulation model EUROMOD, which simulates the tax-benefit system of each EU Member State, the Commission estimated the impact of the increase of statutory minimum wages on several indicators such as wage inequality; individuals' and households' disposable income; in-work poverty; the gender pay gap; the total employment effect; as well as changes in a government's fiscal balance. It should be noted that EUROMOD is a static micro simulation model that does not consider potential labour supply responses and second round macroeconomic feedback effects. However, the employment impacts of the increase of statutory minimum wages necessary to reach the highest reference values are estimated as a second-round effect by applying an *ad hoc* labour demand elasticity for both men and women, based on a comprehensive literature review of the employment effect of an increase of statutory minimum wage (see also Chapter 3 of this report).²⁴

The results of the EUROMOD simulation suggest that these hypothetical minimum wage increases can significantly reduce wage inequality, in-work poverty, and the gender pay gap while generally improving the public budget balance. The average reduction in wage inequality is estimated to range between 8 and 10%; the average decline in in-work poverty is estimated to range between 12 and 13%.

²³ Since Member States have still one year to transpose the Directive (November 2024), it is difficult to assess at the time of writing (February 2024) how many EU countries will, at the date of the transposition, fulfil the adequacy criteria for minimum wages and reach the 80% bargaining coverage rate and therefore not be obliged to establish an Action Plan.

²⁴ The labour market elasticity used in the simulation, a median elasticity of -0.16, is based on a survey of 48 recent international studies (see Dube 2019 and Chapter 3 for details).

Given their over-representation among minimum wage workers, women are more affected by inadequate minimum wage policies than men. Furthermore, since national MW policies tend to compress the bottom of the wage distribution, where women are also over-represented, inadequate minimum wage policy could also lead to a higher gender pay gap, implying that an uprating of national MW as stated in the Directive should reduce the gender wage gap. According to the EUROMOD simulation, the average reduction in the gender pay gap is estimated to be 5% and is expected to decline by more than 10% in Greece, Spain, Romania and Slovakia. Although the hypothetical wage increases are significant for low-paid workers, the impacts on the aggregate wage bill are generally small, as are the potential negative effects on employment. In the hypothetical scenario where all Member States with statutory minimum wages raise them to the highest reference values, the decline in total employment in the EU is estimated to 0.4%. Concerning the number of workers affected the results of the simulation indicate that if Member States increase their minimum wages to the highest reference values, wages could increase for 22 million workers (at 60% of the gross median wage) or 24 million workers (at 50% of the gross average wage). Last but not least the hypothetical minimum wage increases are estimated to have a limited impact on public budgets, and in most cases, they improve Member States' budgetary balance through increased tax receipts (European Commission 2021).

3 Minimum Wages, Employment, Income and Gender Inequality

The first countries to introduce a minimum wage via legislation were New Zealand in 1894 and Australia in 1896 (both were at the time part of the British Empire).²⁵ Legislation was passed after trade-union campaigns, protests and strikes against poor wages and working conditions in sweatshops. During the first half of the 20th century, Australia and New Zealand were followed by Canada in 1918 and then in 1938 by the US.²⁶ In Europe, it was only in the aftermath of the Second World War that Statutory Minimum Wages were introduced, first in Romania in 1949, during the early part of the communist era, and then in France in 1950.²⁷ Although the large majority of EU Member States introduced a SMW from the 1960s to the 1980s, it was not until the early 1990s and the collapse of the Soviet Union and the end of communism in Europe that most Central and Eastern European countries introduced a SMW.²⁸ The UK and Ireland introduced a statutory minimum wage respectively in 1999 and in 2000, and Germany in 2015. As already noted in Chapter 2, of the twenty-seven EU Member States only five do not have today a SMW, namely Austria, Denmark, Italy, Finland and Sweden. Wage floors in these countries are set through collective agreements, mostly at the industry level (see Chapter 4 for details).

The theoretical and empirical controversy on the socio-economic impacts of SMWs has a long history, starting as early at the turn of the 19th century in conjunction with the first introduction. The proponents argued that the SMW ensures fair compensation and decent working and living conditions for workers, that it levels the playing field by limiting unfair competition based on downward

²⁵ It should be noted that the MW in these two countries was not universal but limited to some industries.

²⁶ In the United States, MWs were first introduced at local level (from 1912), and later at the federal level in 1938, with the adoption of the *Fair Labor Standard Act*, under the Roosevelt administration.

²⁷ It is interesting to observe that the introduction of the minimum wage in France in 1950 (*Salaire Minimum Interprofessionnel Garantie, SMIG*) was part of a more general law regarding collective agreements and the extent of freedom of negotiation granted to the social partners. The aim of the law of 11 February 1950 was to strengthen the power of the social partners regarding wage formation via collective bargaining, provided that the wages resulting from the negotiations respected the statutory minimum wage. The introduction of the SMW was also aimed to protect workers in industries not covered by collective agreements.

²⁸ Except Romania (1949), Bulgaria (1966) and Poland (1970) that introduced SMW during the Communist era. All the remaining Central and Eastern European countries established minimum wage in the early 1990s: Czech Republic (1991), Hungary (1991), Slovakia (1991) and the three Baltic countries (1991).

wage competition, thereby eliminating “parasitic employers” (Webb 2020), and that it reduces income inequality and has a positive impact on productivity and economic growth. The adversaries of SMWs, mainly orthodox neoclassic economists, argued that a SMW, by mitigating competition and generating downward wage rigidity in the labour market, results in a reduction in aggregate output, employment and labour earnings, particularly among low-skilled/low-paid workers. In the long run, the increase of labour costs linked to the SMW (and the same goes for minimum wages set in collective agreements) leads to a substitution between capital and labour through the introduction of labour-saving technologies and generates long term-unemployment.

3.1 Theoretical Considerations

As previously mentioned, the theoretical controversy about the labour market outcomes of minimum wages started before the first World War (Gautié 2018, 2021). For neo-classic economists, assuming perfect competition,²⁹ a homogeneous labour force, and no friction in the labour market, a SMW above the market-clearing equilibrium wage will lead to a reduction of aggregate output and employment. By introducing downward wage rigidity in the labour market, the SMW will prevent the return to labour market equilibrium and generate long-term unemployment, particularly among low-skilled workers. While acknowledging a negative relationship between wages and labour demand, Clark (1913) contended that the conclusions drawn from the competitive partial equilibrium model that a minimum wage will be detrimental to employment did not hold when employers had some market power in the labour market.³⁰ According to this approach, i.e. the so-called monopsonic model of imperfect competition,³¹ a dominant employer in the labour market has the power to set

²⁹ Under conditions of perfect competition price and wage are exogenously given, i.e. firms and workers are price takers. The neoclassical model posits that for a profit maximising firm, real wages equal the marginal productivity of labour. Firm's labour demand is derived from profit maximisation. The model also assumed perfect substitution between labour and capital and perfect mobility of the factors of production (labour and capital). Partial equilibrium in the labour market is reached when the supply of labour equals the demand of labour. According to the standard neoclassical model, at this point the market-clearing wage ensures full employment. If the minimum wage exceeds the market-clearing wage the model predicts a reduction of labour demand and an increase of labour supply and the emergence of unemployment.

³⁰ “In the absence of a strong trade union an employer may take advantage of the necessities of the individual employee and secure his or her labor at a rate that is distinctly below what it is worth as measured by the productivity test”, Clark (1913, p. 292).

³¹ A monopsony occurs when there is a dominant employer in a labour market and a large supply of workers. Contrasting with perfect competition where employers are price takers (price and wage are exogenously given), the monopsonic firm has the power to set wages below the marginal productivity of labour, leading to a suboptimal employment level and lower wage for workers. The monopsonic model of imperfect competition also assumes that there are costs to changing jobs, thereby limiting workers' mobility. Furthermore, the model posits that workers have some idiosyncratic preferences regarding working conditions limiting their ability to quit the jobs giving employers market power to control and set wages. As stressed by Manning (2021), the key idea behind monopsony is that the labour supply curve is not infinitely elastic so that an employer that cuts wages by 1% may find it more difficult to recruit and retain workers but does not immediately lose all existing workers to competitors as is predicted by the perfect competition model.

wages below the market-clearing equilibrium wage leading to a suboptimal level of employment and lower wages for workers. The monopsonic model was later formalised by Joan Robinson in her seminal book *The Economics of Imperfect Competition* (Robinson 1933). Like Clark (1913), Robinson posits that the perfect competition model did not apply when there is a power asymmetry between employer and workers. Robinson also showed that if set not too high, a SMW could even increase the employment level of low-paid workers.³² Imperfections in the labour market was therefore the key argument in favour of the introduction of a SMW.

Among advocates of a SMW, Webb (1912) and Webb & Webb (1920) argued that a SMW was not only an effective instrument to fight the inhumane working conditions prevailing in the sweatshops but also claimed that the minimum wage could increase workers' productivity and improve labour efficiency³³ – therefore limiting the potential detrimental impact of the SMW on employment – by pushing employers to adopt productivity enhancing innovation and work organisation (rationalisation, etc.) that could more than compensate the SMW negative cost effects on output and employment. The so-called “shock theory” developed by Webb (1912) is interesting since it combines efficiency and social justice arguments.

While most of the literature on minimum wages prior to the Second World War took a partial equilibrium perspective limiting the analysis to labour market outcomes, a few attempts were made to analyse the macroeconomic consequences of a SMW. As stressed by Gautié (2018), some scholars, like Douglas (1938) or Brown (1940), did not restrict their analysis to labour market outcomes but tried to assess the impact of a SMW on the economy as a whole, analysing the potential adjustment processes in the product market via the impact of MW on prices and labour earnings.³⁴ Taking a Keynesian perspective, one channel of adjustment that came to the fore in academic debates in the US during the interwar period was the likely positive impact of SMW on aggregate demand via

³² It should be noted that if the minimum wage is set above the competitive market-clearing wage, the monopsonic model predicts, in accordance to the standard neoclassical model, a fall of employment.

³³ Webb's (2012) argument that a rise in wages could increase workers' productivity constitutes the underlying mechanism of modern efficiency wage theory. The efficiency wage theory posits that paying workers above the market-clearing wage can lead to increased productivity and overall efficiency. The theory suggests that higher wages motivate employees to better perform and reduces labour turnover.

³⁴ “Broadly speaking, the fixation of wages by the state has been advocated for four major reasons: (i) as a means of establishing a minimum below which the pressure of competition and of employers should not force labor; (2) as a means of raising the efficiency in and of industry; (3) as a part of a general system of compulsory arbitration with a primary view to preventing or reducing strikes; (4) as a means of building up consumers purchasing power and, therefore, presumably, increasing the quantity of goods produced and consumed, as well as the number of employees” Douglas (1938, p. 154).

the increase in low-paid workers' purchasing power and consumption,³⁵ thereby limiting the detrimental impact of minimum wages on aggregate production and employment. Analysing the economic effects of introducing a uniform minimum wage on the economy as a whole, Brown (1940, 98) states

[...] in a closed economy operating at less than full employment and with imperfections both in the factor markets and in the commodity markets a minimum wage is likely to increase the economy's propensity to consume. Whether the total volume of employment will, on balance, be maintained, diminished, or increased depends upon whether the increase in effective demand flowing from the heightened propensity to consume equals the decrease in effective demand caused by factors whose influence is adverse. It seems probable that the establishment of a moderate minimum wage would create more consequences favorable to the maintenance of the level of employment than unfavorable. Though price advances may result, the real income of the persons covered by the legislation will be raised. Whether the real incomes of other members of society will be altered is difficult to foretell, the result depending upon the extent of the price changes and upon whether or not the level of employment is maintained.

The theoretical article of Stigler (1946) published in the *American Economic Review* at the end of the Second World War is regarded as the seminal neoclassical paper on the labour market outcomes of minimum wages. Relying on a partial equilibrium model based on the neoclassical demand theory of production factors and assuming perfect competition, Stigler (1946) concluded that the introduction of a SMW will indubitably reduce aggregate output and have a detrimental impact on labour earnings and employment, particularly for workers paid under the minimum wage prior to its introduction. In the same paper, Stigler also discarded the validity of the aforementioned alternative models such as the monopsonic model, the efficiency wage model, and the shock theory model. Stigler's standard neoclassical approach, predicting a reduction in aggregate output and employment gave birth to a real *orthodoxy* that prevailed up to the end of the eighties.

In the aftermath of Second World War, the academic controversy on SMW was centred around the attempt to reconcile theory and empirical evidence (Gautié 2018). In connection with the publication of Stigler's seminal article, some more "institutionalist minded" economists, such as Richard Lester (1946, 1946a,

³⁵ In a Keynesian perspective, an increase in minimum wages will lead to a change in the income distribution because low-income earners will benefit most from an increase in minimum wages. Because low-income households have on average a higher propensity to consume basic necessities, an increase in minimum wages will most likely increase aggregate demand, but according to the Keynesian approach, the final impact of an increase of MW on aggregate employment remains theoretically uncertain and depends on its impact on the structure of prices, elasticities of demand, labour supply and labour demand elasticities, technological changes (substitution between capital and labour i.e. capital-labour ratio) (Herr et al. 2009).

1960), questioned the marginalist standard microeconomic model of firms' behaviour, in particular the conclusions drawn regarding the predicted negative impact of minimum wages on employment and output. In his first article, Lester (1946) relied on a survey conducted among top executives of manufacturing firms in the southern parts of the US to assess the relative importance of various factors determining firms' employment levels. According to respondents, product demand (orders, sales expectations), was far more important than wage rates for determining a company's volume of employment. Furthermore, the company survey revealed that wage increases did not necessarily induce a reduction of employment. In his second article, based on statistics on wages in local labour markets provided by the US Bureau of Labour Statistics (BLS), Lester (1946a) found "a wide diversity in the wage levels of firms in the same industry and in the same locality. These wage-level differences exist and persist without compensating differences in job content, workloads, working conditions, or other perquisites". (Lester 1946a, 157). The empirical evidence presented by Lester was considered a serious challenge to the "marginalist" conventional microeconomic neoclassical model and contributed to explain why the introduction of the SMW does not necessarily have a negative impact on output and employment (Lester 1946, 75–6). However, the validity of Lester's empirical evidence was questioned by Machlup (1947) and Stigler (1947). According to these authors, Lester's case study methodology was flawed and could not constitute a refutation of the standard marginal productivity theory.

Until the end of the 1960s, the theoretical controversies over the impact of minimum wage (MW) on employment lacked empirical evidence. During the 1970s the development of computerisation, the growing availability of time-series data and systematic use of econometric techniques gave rise to several empirical studies that assessed the economic impact of SMW on production and employment. Until the mid-1980s the majority of empirical studies conducted mainly in the US find a negative relationship between SMW output and employment, confirming the predictions of the standard neoclassical model. These results were however contested both because of a potential publication bias³⁶ and of the use of inadequate estimation techniques and identification issues regarding a potential causal effect between a variation of SMW and labour market outcomes.

³⁶ An important topic in meta-analysis studies, a publication selection bias occurs when the selection of empirical studies in peer-review journals is made based on the statistical significance of results and/or when the empirical results satisfy pre-conceived theoretical expectations (in our case the adverse effects of SMW on employment). In a meta-analysis of 1,474 estimated minimum-wage elasticities, Doucouliagos & Stanley (2009) found strong evidence of publication selection for significantly negative employment elasticities in the US minimum wage literature. Gautié & Laroche (2018) also found that the French empirical literature on the impact of SMW on employment displays substantial publication selection bias towards publications showing detrimental SMW employment effects.

While the academic debates on SMW in the aftermath of Second World War and up to the end of the 1980s were centred around the attempt to reconcile theory and empirical evidence, during the 1990s an increasing number of empirical works tried to better relate to economic theory. In fact, the early 1990s saw the emergence of the “New Minimum Wage Research”, that was marked in its early stages by an intense controversy, in particular following the publication of *Myth and Measurement* by Card and Krueger (1995). The publication of *Myth and Measurement* marked an important episode in the history of minimum wage debates, not only because of its method – the systematic use of so-called natural experiments, difference-in-differences and discontinuity econometric techniques – but above all because of its iconoclastic results. These found no detrimental impact on employment, and even in some aspects slightly positive effects (see Card 1992, Card & Krueger 2000 and section 2.2.1 below). The econometric evidence that minimum wage hikes did not decrease employment stimulated a reassessment of the underlying theory and theoretical models were developed that could accommodate Card and Krueger’s (1995) results. The 1990s New Minimum Wage Research and its controversial empirical results coincided therefore with a renewed interest in theories of imperfect labour markets and the development of sophisticated variants of the aforementioned imperfect competition models such as the dynamic monopsony models (Machin & Manning 1995; Manning 2003, 2011, 2021), the wage efficiency models (Rebitzer & Taylor 1995) and the job search-matching models (Burdett & Mortensen 1989).³⁷

All these theoretical models posit some form of power asymmetry between employers and workers regarding wage setting, especially in the low-wage segment of the labour market. In addition, the existence of frictions in the labour market as well as imperfect information regarding the heterogeneity of worker preferences and job characteristics make the hiring process and job search activities costly. Another implication of theoretical models with labour market frictions and information asymmetry is that when an employer reduces wages not all workers will leave the firm, as is assumed in the perfectly competitive model. Conversely, wage increases can reduce labour turnover, i.e. help to fill job vacancies more rapidly and to retain workers. As pointed out by Manning (2021), employers do not face a labour supply with infinite elasticities as assumed

³⁷ Job search-matching models analyse the process by which employers and workers find suitable employment matches. These theoretical models explore how job seekers and firms search for each other considering factors such as market conditions, skills, and preferences, in order to understand the employment dynamic in the labour market. Labour market frictions, heterogeneity in workers preferences and job characteristics as well as imperfect information means that the hiring process and job search are costly in time and resources. These job-search matching models posit supply-side responses to minimum wage increases, such as increased job-search efforts, that may lead to improved matches and lessen or even reverse negative employment effects. The pioneer search equilibrium model developed by Burdett and Mortensen (1989) shows that search frictions in the labour market generate a monopsony-like equilibrium and that a minimum wage can increase employment.

in the competitive model but an upward sloping labour supply curve, implying that employers have some forms of market power regarding wage setting. The dynamic monopsonic and the search-matching model, both based on labour market frictions, imperfect information and power asymmetry, predict that a moderate increase of SMW may even have a positive impact on employment in the low-wage sector even when the labour market is characterised by many (small) companies, rather than one dominant employer as in the traditional Joan Robinson's monopsonic model. As early as the mid-1990s, Reciter and Taylor (1995) were the first to use an efficiency wage theoretical framework to analyse the impact of a SMW showing that a moderate increase in the minimum wage, even in labour markets characterised by many employers, may induce an increase in employment in the low-wage sector. The positive impact on employment results from the positive relationship between wage and labour productivity, like in the aforementioned *shock theory* developed by Webb (2012). As noted by Gautié (2019), in all of these imperfect competition models the introduction (or a rise) of a SMW induces a shift from an equilibrium characterised by low wages, high labour turnover, high vacancy rate, low equilibrium level of employment towards an equilibrium characterised by higher wages, lower labour turnover, lower vacancy rate and a higher level of employment at the equilibrium.

Worth noticing is the quasi-absence of an explicit gender perspective in these theoretical models.³⁸ However, we may argue that implicitly the monopsonic model, by positing that workers have some idiosyncratic preferences regarding working conditions (access to childcare facilities, working time and work-life balance arrangements, commuting time etc.) and that these preferences might differ between men and women, may to a larger extent limit the ability of women/mothers to quit their jobs, giving employers a higher market power to control and set their wages. Manning (2003), using a monopsonic theoretical model, explains the differences in labour market outcome and the persistence of a gender wage gap by the prevailing traditional division of labour between men and women, the lower female labour market attachment, and the lower job mobility providing the employer with non-negligible market power to set wages. In a recent published German empirical study analysing the wage, employment and reallocation impacts of the introduction in 2015 of SMW in Germany, Dustman et al. (2022) found that the increase in commuting time induced by the increase of minimum wage is considerably larger for men than for women, in line with the hypothesis that women have a stronger preference to work close to home and confirming that idiosyncratic preferences regarding working conditions and job mobility differ between men and women.

³⁸ Another factor that may explain the lack of interest in the gender dimension and “the male centred” analysis of MW literature is the preponderance of the male breadwinner model and the late feminisation of the labour force in the US and many European countries.

To the best of our knowledge no specific theoretical model has been developed to analyse the impact of increase of MW on labour supply. According to standard theory of labour supply, an increase in wage has two opposite effects: an income and a substitution effect. The substitution effect implies that an increase of wage has a positive effect on labour supply, since the opportunity cost of leisure increases. The income effect implies that an increase of wage has a negative effect on labour supply since workers can afford to work fewer hours whilst maintaining their level of income. Which effects dominates is an empirical question and depends on workers' wage level. For low-paid workers, the substitution effect prevails over the income effect, and an increase of wage will have a positive effect on labour supply. Conversely for high paid workers, the income effect will dominate, explaining the backward bending shape of the labour supply curve, imply that an increase of wage reduces labour supply via a decrease of working hours. Since a higher proportion of women are located in the lower part of the wage distribution, there are strong reasons to think that an increase of MW will affect positively the labour supply of low-paid women, at least at the intensive margins, i.e. increasing working hours. (see also Agostinelli & Sorenty 2018).³⁹

Anxo and Carlin (2002) analysed the socio-economic factors affecting the gender division of labour among households, i.e. the allocation of time between non-paid domestic and care activities and paid work (see also Anxo et al. 2011). Using alternative theoretical models of the gender division of labour, namely the traditional Beckerian home specialisation model and a cooperative bargaining model of family, we found that an increase in female wage promotes a more equal gender division of labour, implying higher working hours and lower hours spent on domestic and care activities for women, as well as an increase of hours spent on domestic and care activities for men.⁴⁰ So according to these results, an increase in MW, by increasing the bargaining power of women in the household, will have both a positive impact on female labour supply and lead to a more equal gender division of labour between paid and unpaid household activities. Few empirical studies have specifically analysed the impact of an increase in MW on labour supply.⁴¹ One recent exception is God et al. (2021), exploring the impact of an increase of SMW on parental labour supply in the US. The authors found a significant positive impact on female labour supply particularly for lone mothers with pre-school children. It is also worth noting that the positive impact

³⁹ Using US data, Agostinelli & Sorrenti (2018) found that the substitution effect dominates the income effect particularly for female low-wage workers (mothers and lone mothers).

⁴⁰ For every 10% increase in the wife's wage, the husband's share of housework increases by 2.5%. There is also a negative own-wage elasticity of housework for married women. For every 10% increase in the wife's wage, her own housework hours tend to fall by 3% (Anxo & Carlin, 32).

⁴¹ Many studies have been conducted to analyse the impact of a variation of wage, tax, and benefits reforms (such as the Income Tax Credit) on labour supply (see Blundell & McCurdy 1999 for a review). Overall, empirical studies show that male labour supply elasticity is close to zero while female elasticity is sizeable and positive, particularly for low-wage women, implying a stronger upward sloping labour supply curve.

of the MW increase mainly took the form of higher labour force participation for low-wage female workers; it had a limited impact on hours worked by already employed female workers.

Finally, it should be noted that these theoretical developments are mainly *post hoc* theoretical rationales to explaining the absence of detrimental impacts of SMWs on employment and not attempts to theoretically derive a structural model to be econometrically estimated. The same gap exists between theory and empirical evidence in the case of the standard neoclassical perfectly competitive model. The estimation of the impact of SMWs is not either derived from a structural theoretical model but from the estimation of reduced form equations derived from the very basic standard model. Having these methodological caveats in mind, the next section provides a review of empirical literature regarding the impact of an increase of SMW on employment, wage structure and the gender wage gap.

3.2 Empirical Evidence on Employment Effects

Most of the policy debate and the economic and empirical literature on SMW has focused on its employment effects. The overwhelming majority of empirical studies analysing the impact of minimum wage on labour market outcomes was carried out in the US and the UK. In particular, the adoption of federal minimum wage in the US in 1938 by the Roosevelt administration (“The Fair Labor Standards Act of 1938”) gave a new impetus to the minimum wage debate as well as the development of new empirical research. Similarly, the introduction of a statutory minimum wage in the UK in 1999 generated a new wave of empirical studies. Up to the early 1970s, available empirical evidence of employment effects of a SMW was essentially based on descriptive statistics and field case studies. These showed, as mentioned above, contrasting results. With the growing availability of time-series data on wage, prices and employment and the development in econometrics, a wave of econometric estimations was conducted from the mid-1970s. Most of these empirical studies were commissioned by the 1977 Minimum Wage Study Commission of the US Congress during the Carter Administration. The Commission’s main objectives were to analyse the socio-economic and political consequences of the 1977 Amendment of the 1938 Fair Labor Standard Act.⁴² In addition to a description of the demographic profile of minimum wage workers based on the US Current Population Survey, the final report of the Commission (US Congress 1981) provides a comprehensive literature review of the impact of the 1938 Fair Labor Standard Act on employment, unemployment, inflation and income distribution as well as some developments concerning the issue of non-compliance. As shown by the Commission, around 10.6 million dependent employees in the US had jobs paying the SMW or less in 1980, representing 12.4% of total wage and salary employment. Half of these had a wage less than the

⁴² The 1977 amendment increased the minimum wage in yearly increments through 1981 to \$3.35 an hour.

mandated minimum. Examination by age-group showed that teenagers, but also senior workers (65 years and older), were much more likely to earn a wage less than or equal to the SMW. The socio-demographic analysis also revealed that women were overrepresented at the low end of the wage distribution, 18% of all working women earned a wage less or equal to MW compared to 8% of all working men. As with women, African Americans and other ethnic minorities (such as Hispanic) were also overrepresented among workers paid at or below MW.⁴³

Interesting to note is that the differences between men and women were more pronounced than among ethnic groups. Regarding the distribution by industries and occupations, a majority of MW workers were working in the service sector (domestic workers and retail workers), or in agriculture. The final report of the Commission also provides a comprehensive survey of empirical studies regarding the employment impact of an increase of MW with a special focus on the impact on teenage and youth employment. Most of these empirical studies used time-series data and estimate reduced forms, controlling for factors such as business cycle, seasonal influences and time trends and covered periods between 1954 and 1979. A review of the empirical literature commissioned by the Congress and performed by Brown et al. (1982) showed that a 10% increase in the MW would reduce teenage employment by between 0.5% and 3%, depending on the time period analysed or the set of control variables included in the estimated specification. As noted by Brown et al. (1982) to the extent that differences in results can be ascribed to differences in the specification chosen, the better choices seem to produce estimates at the lower end of the range with findings, ranging from a 0.5% to a 1.0% reduction (i.e. a loss of between 40,000 and 120,000 jobs). The Commission also reports estimates of the impact of a 10% increase in the MW on teenage unemployment using the full 1954–1979 period. They found that an increase in the MW raised unemployment by 0.1 percentage point, the relatively small impact on teenagers' unemployment being explained by a reduction of their labour supply. Using data for the full period (1954–1979), the Commission also reports a significant lower impact on young adult employment (20–24 years old), a 10% increase of MW reducing young adult employment by 0.25 per cent.

As noted in the final report of the Commission (US Congress 1981, 43), few empirical studies before the early 1980s addressed the impact of an increase of MW on employment of adult men and women. The few time-series studies produced mixed results, with in most cases small and insignificant variations of adult employment. The Commission also reported cross-sectional estimations at the industry level. These showed that the strongest evidence of employment reductions has been found in low-wage manufacturing industries while studies of retails and services industries, which also became in the US increasingly covered

⁴³ According to the Commission, around 20% of African Americans earned a wage less or equal to MW.

by minimum wage requirements during the 1960s, produced conflicting results, and therefore it was difficult to reach any conclusions. All in all, even though most of these early econometric time-series studies confirmed the negative relationship between employment and SMW as predicted by the standard neoclassical model, the detrimental impact on employment was, however, moderate and only statistically significant for teenagers. The few cross-sectional econometric studies on specific industries gave also mixed and uncertain results due in particular to the near universality of the federal MW and therefore the difficulty of identifying a causal relationship between the variation of MW and employment at the industry level.

As mentioned above, the 1990s opened a new era of empirical research with the emergence of the “New Minimum Wage Research” and a wave of new estimations analysing the impact of MW on employment. The publication of *Myth and Measurement* by Card and Krueger (1995) gave rise to an intense methodological controversy on the econometric methods previously utilised and their inability to identify a clear-cut causality between variation of MW and employment. The method proposed by Card and Krueger was to identify a series of quasi “natural experiments” distinguishing between treated and non-treated individuals,⁴⁴ that would provide convincing evidence of a causal relationship and not a spurious correlation between MW and employment as in the previous empirical studies based on time-series (Card & Krueger 1995a). In addition to questioning the validity of the time-series approach, Card and Krueger (1995a) showed that the results of the previous studies reviewed by Brown et al. (1982) analysing the impact of MW on employment had been affected by serious identification problems relating to the causal relationship, specification-searching and publication bias “induced by editor’s and authors tendency to look for negative and statistically significant effect of the minimum wage” consistent with the prediction of the standard neoclassical model (Card & Krueger 1995a, 243).

The primary aim of the analyses in *Myth and Measurement* was to identify and assess the magnitude of the causal effects of a rise in the minimum wage by promoting the use of “natural experiments”, regression discontinuities, and difference-in-differences methodological approaches (Card & Krueger 1995, 2017). Using cross-sectional data and a variation of minimum wage at the state level,⁴⁵ Card (1992) analysed the effects of the approximately 25% increase in California’s hourly minimum wage between 1987 and 1989. As shown by Card (1992), a comparison of wage distributions before and after the increase of MW suggests that the rise in the California MW reduced the proportion of California

⁴⁴ That is, various groups affected (treated) or not (non-treated) by MW and MW increase.

⁴⁵ In the late 1980s, several States “responded to the decade-long decline in the real value of the federal minimum-wage by establishing wage floors above the federal rate. These state-specific increases provide a valuable opportunity to study the effects of minimum wage legislation.” (Card 1992, 38).

workers earning less than the new minimum wage and a majority of the workers affected by the increase moved to the new minimum wage level. Although the rise in the minimum wage in California increased the earnings of low-wage workers, it does not seem to have significantly reduced employment, even in a low-wage sector such as the retail trade industry. Card (1992) found an increase of teenagers' employment, their earnings rising by 10% while their employment-population ratio rose by 4%, contrasting with the predictions of the neoclassical model and the results of previous aggregate time series studies which found a detrimental impact on teenagers' employment.

Exploiting special, designed panel data involving both state and time-series variations over relatively long sample periods (1973–1989) of state minimum wage laws and labour market conditions, Neumark and Washer (1992) analysed the impact of MW on employment for teenagers and young adults. Contrasting with the results of Card (1992),⁴⁶ the authors found a negative (but moderate) impact of state MW on employment, supporting the consensus of negative effects suggested by the early time-series evidence surveyed by Brown et al. (1992). Neumark and Washer found a 10% increase of MW reduced employment by respectively 1% and 2% for teenagers and 1.5 to 2% for young adults (aged 20–24). The authors also argued that Card's findings (1992) of positive employment effects for teenagers was due to a misspecification of the estimated model excluding school enrolment rates. These two seminal empirical papers with divergent findings regarding the employment effects, whose authors all belonged to the “New Minimum Wage Research”, were the start of further long-lasting controversy between those supporting the predictions of the standard neoclassical model and those in favour of imperfect competition models. They also contribute to explaining the continuing absence of a consensus regarding the impact of MW on employment, a lack of consensus still present today.

Using a survey of fast-food restaurants and a difference-in-differences approach, Krueger and Card (1994) analysed the employment impact of the 1992 increase in the MW in New Jersey. Using a policy-discontinuity-at-state-borders approach, the authors compared the development of employment in fast-food restaurants in New Jersey and eastern Pennsylvania, a neighbouring state not subject to an increase of MW. They found no evidence that the rise of New Jersey's minimum wage reduced employment at the fast-food restaurants in that state. Using standard regression techniques on a wide variety of alternative specifications the authors found that the increase in the MW increased employment. It is worth noting that the price of fast-food meals increased in New Jersey compared to eastern Pennsylvania, suggesting that the burden of MW rise was passed on to consumers.

⁴⁶ The papers of Neumark & Washer (1992) and Card (1992) was published in the same issue of the *Industrial and Labor Relations Review* (IL).

Also using a longitudinal survey on fast-food restaurants, this time in Texas, Katz and Krueger (1992) examined the impact of 1991 increases in the federal MW on a low-wage labour market. They found that the increases of the federal minimum wage significantly compressed the distribution of starting wages in the Texas fast-food industry. Contrasting also with conventional predictions, employment increased more in those firms likely to have been most affected by the 1991 minimum wage hike than in other firms.

Analysing the effects of mandated minimum wages on wage dispersion and employment in the UK, Machin and Manning (1994) found that the decline of MWs in the 1980s largely explained the rise of wage inequality in the UK over these years. The authors found also that a MW has either no statistically significant effect or a positive effect on employment in accordance with the above reported US results and consistent with the theories of non-competitive labour market models such as dynamic monopsonic model described in the previous section. Taking a gender perspective, Connolly and Gregory (2002) showed that the introduction of SMW in the UK in 1999 was particularly beneficial for women and significantly reduced the gender wage gap. Using individual data and a difference-in-differences approach they found no significant detrimental impact on employment and no changes in hours worked by either full or part-time women one, two and three years after the introduction of SMW, and they found no change in the probabilities of remaining in full or part-time work, or transiting between the two.

These non-conventional results – that is, the absence of negative impact on employment, and, in some of the above-mentioned empirical studies, even slightly positive effects – were clearly in contradiction with the predictions of the standard neoclassical model. The unorthodox results led to a lively controversy among US economists that questioned the external validity of the design-based approach and also the adequacy of the econometric specifications used to estimate employment effects. A series of new estimations were conducted using longitudinal cross-sectional (panel) data.

Newmark and Washer (2007) performed a comprehensive review of more than 100 empirical papers published between 1991 up to 2006 on the employment effects of minimum wages – in the United States and some European countries.⁴⁷ According to the authors, a sizable majority of the surveyed studies in their review give a relatively consistent, although not always statistically significant,

⁴⁷ Regarding European countries, Newmark and Washer's (2007) review include empirical studies from France, Greece, the Netherlands, Portugal and Spain. The selected European empirical studies are few and for most of them the impact of MW on employment is limited to teenagers. The results from these European countries are often flawed with specification and identification problems regarding the causal effect of a variation of MW. A majority of the reported European studies show moderate adverse employment effect (with an employment elasticity ranging from -0.2 to -0.4 for teenagers) or no significant effect (see Table 1; Newmark & Washer 2007, 134–50).

indication of negative employment effects of minimum wages. Newmark & Washer (2007) also show that few studies provide convincing evidence of positive employment effects of minimum wages, especially from those studies that focus on the broader groups (rather than a narrow industry) for which the basic competitive model predicts a negative impact on employment. Second, the studies that focus on the least-skilled/low-paid groups provide relatively overwhelming evidence of larger dis-employment effect effects for these groups.

Two years later, Doucouliagos and Stanley (2009) used meta-analysis methods to 64 minimum-wage studies conducted in the US between the mid-1990s and 2007 to assess the MW employment impact. Based on a meta-regression analysis of nearly 1,500 estimates of employment elasticity⁴⁸ reported in the selected 64 published articles, they found strong evidence of publication selection bias in the US minimum-wage effects literature. Once this publication selection bias is corrected, little or no evidence of a statistically significant negative association between minimum wages and employment remains, confirming Card and Krueger's (1995a) previous results and contrasting with the Newmark and Washer (2007) above mentioned review of US empirical studies.⁴⁹ Not consistent with the prediction of neoclassical theory of a negative employment response in the long run, due to substitution between capital and labour, the authors found that the long-run employment elasticity was actually less negative (more positive) in the long run (Doucouliagos & Stanley 2009, 421). As noted by Doucouliagos and Stanley (2009) these results are robust with respect of the publication sample used and the meta-regression model employed.

In their book *What Does the Minimum Wage Do?*, published in 2014, Belman and Wolfson review the two decades (1990–2012) of conflicting findings on the employment and wage effects of MW rises. Around 90% of the around 100 articles reviewed focus on the US labour market. One of the aims of the book is to assess the extent to which the empirical research can be interpreted as arriving at a common result regarding the employment effect of a rise of MW. By conducting a statistical meta-analysis of 23 empirical papers the authors conclude, “if negative effects on employment are present they are too small to be

⁴⁸ Standard definition of employment elasticity: How a 1% change in (minimum) wage affect employment measured in %. A negative employment elasticity of 1% implies that a 10% increase in minimum wage reduces employment by 10%.

⁴⁹ Doucouliagos and Stanley (2009) reports an uncorrected average employment elasticity of -0.19 but -0.01 when the publication bias is corrected. In other words, even though the corrected average elasticity is negative and statistically significant it implies that a 10% increase of MW will reduce employment by only -0.1%. As noted by the authors an elasticity of -0.01% has no meaningful policy implications.

statistically detectable.”⁵⁰ The authors’ overall conclusion is that moderate MW rises are not detrimental to (low-wage) employment supporting the results of Card and Krueger’s “new economics” of MW research.

Leonard et al. (2014) provides a systematic and comprehensive meta-analysis of the UK’s minimum wage research literature published between 1994 and 2010. Overall, they found no evidence of adverse employment effects. Their meta-analysis from 16 UK studies of 710 partial correlation coefficients and 236 minimum wage employment elasticities all confirm the absence of a significant adverse employment effect of an increase of MW. This general finding is robust to the research sample used and the meta-regression model employed. The results in Leonard et al. (2014) are consistent with the above-mentioned meta-analysis of the larger US minimum wage research literature conducted by Card and Krueger (1995a) and Doucouliagos and Stanley (2009). However, unlike the US minimum wage research, there is no evidence of reporting/publication bias in the UK research literature.

While much attention has been paid to the question of how minimum wages affect employment stocks, considerably less attention has been given to their effects on employment flows. Dube et al. (2016) provided the first estimates of the effects of minimum wages on employment flows in the US labour market. As usual, they identify the impact of MW by using policy discontinuities at state borders. Consistent with search models with endogenous separations the authors found that minimum wages have a sizeable negative effect on employment flows but not on employment stocks. Quits/layoffs and recruitment fall among affected workers, especially those with low tenure.

Gautier & Laroche (2018) also apply a meta-analysis to explore the effects of minimum wage on employment in France. Overall, their meta-analysis shows that a 10% increase in minimum wage results in a 0.5% reduction in employment, suggesting an even smaller effect than in the above reported US and UK studies when publication bias is not corrected. Once the effects of publication selection bias are removed the impact of minimum wage on employment in France is still negative but not statistically significant at the 5% level, implying no discernible dis-employment effect.

Germany introduced for the first time a nationwide statutory minimum wage in 2015. As stressed by Bosch (2018) the introduction of the SMW in Germany coincides with the erosion of the encompassing corporatist industrial relations

⁵⁰ Bellman and Wolfson (2014, 176) provide a large number of meta-estimates of the employment elasticity. “*The range of the simplest estimates found is [-0.099, -0.034], with the precision-weighted estimates falling in the interval [-0.050, -0.034]. Including a correction for publication bias shifts the range toward zero [-0.06, -0.018], with the precision-weighted estimates in the interval [-0.048, -0.018].*”

system. The decline of both union density and collective bargaining coverage led from the mid-1990s onwards to the development of a large low-wage sector and an increase of wage and income inequality (Bosch 2015). Prior to its introduction some German *ex ante* evaluation predicted large employment losses⁵¹ contrasting with the available international empirical literature and also some previous studies analysing the employment impact of sectoral minimum wages in Germany (Caliendo et al. 2019). According to Bosch (2018) and Bosch et al. (2023), three years after the minimum wage was implemented, and contrary to the negative *ex ante* predictions, no reversal of the employment trend can be discerned, although the main affected groups of workers, industries and regions have all seen substantial increase in wages, in part related to the introduction of the MW. It should be noted that if regular jobs have not been negatively affected, marginal jobs such as mini jobs have experienced a decline after the introduction of the MW. German evaluations based on difference-in-differences methods were up to the end of the 2010s rare, the simple descriptive analysis conducted by Bosch et al. (2023) points therefore to the absence of detrimental employment effects. In spite of some serious problems with non-compliance, Caliendo et al. (2019) show that a large share of employees was paid at the new minimum wage and that there was a positive effect of SMW on hourly wages, in particular in the lower segment of the wage distribution. A review of German studies using a difference-in-differences approach show a moderate negative impact on overall employment that was mainly driven by a reduction of hiring and marginal employment (Caliendo et al. 2019).⁵² However, compared to the *ex ante* long-run predictions, these short-run effect are very moderate, and it seems that the reform did not trigger substantial negative employment impacts, at least in the short run. A more recent German published empirical study investigated the wage, employment and reallocation effect of the SMW in Germany that affected 15% of all wage earners (Dustmann et al. 2022). Based on an identification design exploiting variation in exposure across individuals and local areas, the authors found that the SMW increased wages significantly but did not have a detrimental impact on employment. The introduction of SMW also led to the reallocation of low-wage workers from smaller to larger companies, from lower- to higher-paying firms and from less to more productive establishments. The reallocation effect accounts for up to 17% of the wage increase induced by the MW. Moreover, at the regional level, average establishment quality increased in more affected areas in the years following the introduction of the SMW. As pointed out by Dustmann et al. (2022), the reallocation of workers to more productive establishments, and hence the improvement in the average quality of establishments in the economy, is also the core idea behind the Swedish model

⁵¹ As reported by Caliendo et al. (2019) and Bosch et al. (2023) the *ex ante* studies predicted a decrease of employment by 500,000 up to over one million jobs in the long run, see Caliendo et al. (2019).

⁵² As noted by Caliendo et al. (2019) some mini jobs seem to have been transformed into regular employment.

of *solidaristic wage policy*, higher wages driving low-performing firms out of the market and increasing the overall productivity in the economy.⁵³

The most recent comprehensive international review of evidence on the impact of MW was carried out by Dube (2019).⁵⁴ A large majority of the reviewed papers are from the US and, apart the UK, few empirical studies are reviewed from the European Union (Germany and Hungary). As noted by Dube the fact that a disproportionate share of minimum wage studies has been conducted in the US is due to the large variation in the effective MW across various states/localities. Pooling across recent 36 estimates from the US, the median estimate of employment elasticity is -0.17, which is quite small in economic terms and consistent with the above-mentioned studies reported by Doucouliagos and Stanley (2009) and Belman and Wolfson (2014). A majority of the recent US estimates (26 of 36) are based on narrow demographic groups or specific sectors,⁵⁵ such as teenagers, low-paid restaurant or retail workers, and low-educated migrants. Using a variety of econometric methods to identify the causal effect of the variation of MW on employment, such as traditional difference-in-differences approach, policy discontinuity (comparing border counties/localities), synthetic control groups etc., the median employment elasticities for these 26 US studies is -0.19. Reviewing German studies conducted in connection to the introduction of SMW in 2015, Dube reports more modest and even positive impacts on employment, the estimated employment elasticities ranging from -0.3 to +0.17. Hungary enacted a substantial increase of its SMW in 1999, increasing from 35% to 55% of the median wage of full-time workers over 2 years. Analysing the results of Hungarian empirical studies conducted during the second half of 2010s, Dube reports low employment elasticities ranging from 0.0 to -0.2. Summing up the evidence Dube (2019, 50) states:

The overall body of evidence suggests a rather muted effect of minimum wages to date on employment. The median Own Wage Employment Elasticity (OWE) across the 48 estimates from various countries and affected groups is around -0.16, which suggests that the minimum wage raises wages much more than it has any effect on jobs. Moreover, for the set of studies that consider broad groups of workers the median OWE estimate is quantitatively close to zero (-0.04).

⁵³ The same argument may be found in Webb (2020) which argues that a SMW levels the playing field by limiting unfair competition based on downward wage competition, thereby eliminating “parasitic employers” reducing labour earnings inequality and having a positive impact on productivity and economic growth.

⁵⁴ The purpose of the Dube (2019) report was also to review recent research documenting the impact of the National Living Wage (NLW) in the UK, to inform the UK government’s decisions on the future remit of the Low Pay Commission (LPC) beyond 2020.

⁵⁵ The choice of these demographic groups or specific low-paid sectors is due to the fact that a large share of these worker groups have a wage near the mandated minimum wages and it is therefore easier to identify some employment effect.

Dube (2019) also examines the main reasons why the detrimental impact on employment has been limited, in particular by analysing potential channels of adjustments mediating the impact of minimum wages on employment. Price adjustments appears to be the most common response to an increase of MW, in particular in low-wage sectors such as restaurants or retail. An increase of prices does mean that an increase in SMW is inefficient. For example, the increase of the minimum wage in Hungary represented a large transfer of real incomes to low-income families: the consumer price increases were borne broadly while the wage increases were targeted at the lower segment of the wage distribution. Consistent with wage efficiency models or job search-matching models described in the previous section, some of the reported studies found that the increase of MW induced a rise of labour productivity (in line with the predictions of the shock theory) and/or a reduction of labour turnover. But the main explanation for the limited detrimental employment effect of MW is due to the existence of imperfect competition in the labour market, as described in the theoretical section.

To sum up, the most recent reviews of literature report no evidence of significant adverse employment effects attributable to minimum wages in the US and the UK. Few empirical studies have been carried out in EU Member States, except for France, Germany, Greece, Hungary, Spain, Portugal. Consistent with the results from the US and the UK, the review of the available empirical literature for these countries shows small negative and, in some case, slightly positive effects of an increase of MW on employment. It should be emphasised that the non-competitive theoretical models described previously as well as empirical studies, which found no significant negative impact on employment or even a positive impact, considered only moderate increases of SMW.⁵⁶ Dube (2019) notes that the detrimental effect of an increase of MW are close to zero up to around 60% of the median wage,⁵⁷ consistent with the decency level stipulated in the EU Minimum Wage Directive.

As shown in Chapter 2, a majority of Member States with statutory minimum wages do not fulfil the decency threshold criteria enshrined in the Minimum Wage Directive (60% of the median wage or 50% of the average wage) and these Member States have to increase the level of minimum wages to attain the reference values. As also mentioned in Chapter 2, the increase of statutory hourly MW needed to reach the decency threshold target can be substantial, particularly in Baltic and Central and Eastern European countries.

⁵⁶ As noted by Skedinger (2020), the employment impact of an increase of MW is not linear and we cannot exclude that large increases of SMW might be detrimental to employment, in particular in some of the Baltic and Central and Eastern European Member States which require a large uprating of their SMW in order to comply with the EU MW Directive.

⁵⁷ Dube (2019) shows that empirical studies using sub-state county-level variation in US found that the employment effect is small in lower-wage counties where the minimum stood at up to 81% of the median wage.

By favouring the setting of adequate statutory minimum wages, the primary objective of the Directive is to help workers achieve a decent standard of living, reduce wage inequality, help to close the gender wage gap and reduce income disparities by lowering in-work poverty. It is therefore crucial to analyse how an uprating of minimum wages will affect wages, earnings and income distribution. The next section is an attempt to summarise recent empirical evidence on the impact of an increase of MW on wages, earnings and income distribution and wage inequality between men and women.

3.3 Empirical Evidence on the Impact of MWs on Wages, Labour Earnings and Household Income Distribution

Parallel to the studies analysing the employment effect of MW, a growing number of studies since the mid-1990s have analysed the extent to which an increase in the MW affects the distribution of hourly wages, individual labour earnings, and household income.⁵⁸ It should be first noted that the prerequisite to identify and assess the impact of SMW on employment is that the increase of MW positively affects hourly wages at the bottom end of the wage distribution. Secondly the impact of a change of SMW can differ depending on whether the analysis focuses on the impact of MW on wage rates (such as hourly wages), individual labour earnings or household income distribution. The impact of a variation of SMW on the distribution of individual labour earnings depends both on its impact on hourly wages at the bottom end of the wage distribution and its impact on the employment of low-paid workers (both in terms of working hours and number of workers). Finally, the impact of minimum wages on the distribution of household income depends on where in the household income distribution the beneficiaries of SMW are located as well as on the structure of the tax and benefit system of the country considered.

Starting with the impact of MW on the distribution of hourly wages, the introduction of, or an increase in SMW can influence the wage structure in several ways. Assuming reasonable levels of enforcement and compliance, the most obvious effect of a SMW is higher wages for incumbent male and female employees who previously received a wage below the minimum wage. In other words, one evident effect of MW is to truncate the lower tail of the wage distribution (below the mandated MW) and to create a spike at the minimum. By shifting the wage distribution in favour of low-paid workers, an increase in MW will reduce wage inequality. However, an increase in the MW can also lead to changes in wages higher up in the wage distribution, that is, beyond those earning the MW. These “spillover effects” or “ripple effects” may arise if employers substitute the lowest-skilled workers with workers with higher skills, or if employers (and/or trade unions) want to preserve wage differentials

⁵⁸ The wage rate refers to the hourly wage a worker is paid. Individual labour earning is the amount of money an employee is paid for working over a certain period (monthly or yearly), often gross earnings (i.e. before income tax).

in the company/sector between low- and high-skilled workers, in order to create behavioural incentives or for reasons of fairness. In the latter case, the preservation of wage differentials in the wage structure will lead to an increase of wages for workers initially above the MW. It should be noted that if these spill-over or ripple effects concern only workers in the lower half of the wage distribution (the first deciles), an increase of SMW will necessarily reduce wage inequality. Early empirical evidence (e.g. Card & Krueger 1994; Hirsh et al. 2011; Steward 2012; Allegretto & Reich 2016) do not indicate positive spillover effects or ripple effects in wages above the new minimum, but more recent work indicates some spillover effects up to the third deciles, 40% of the wage increase being due to these spillover effects (e.g. Cengiz et al. 2019).

According to Neumark and Wascher (2007 & 2008) and Dube (2019), one recurrent finding in the MW literature for developed industrial countries is that an increase of SMW affects positively wages in the lower tail of the wage distribution and creates a spike in the wage distribution at the minimum. In his literature review of the impact of MW on employment Dube (2019) points out that the increase in wages due to an increase of MW is significantly higher than the variation of employment. Bellman and Wolfson (2014, 186) report that the increase of the federal MW had a positive effect on the average wage rate for a large majority of low-wage industries in the US. The various increases of SMW in the US during the second half of the 2000s have had a significant positive impact on the wage floor and the increase of MW translated in a substantial increase of hourly wage for low-paid/low-skilled workers.

The first empirical studies analysing the impact of SMW on the wage distribution were carried out in North America (US and Canada) and the UK during the 1990s. These studies, published in top-ranking peer-reviewed economic journals,⁵⁹ analysed the role of labour market institutions such as industrial relations systems and minimum wages on wage distribution and wage inequality (Card 1996; Freeman 1993; DiNardo et al. 1996; Fortin & Lemieux 1996; Lee 1999). All these studies, using advanced econometric methods,⁶⁰ show that during the 1980s a large proportion of the increase of wage inequality (around 70%) in the US in the lower tail of the distribution, particularly for women, was due to the decline of unionisation and the fall of the real value of SMWs.⁶¹ Conversely, the reduction of wage inequality in the US during the 1970s was due to rising union density and an increase in the real value of SMWs. More recently, using panel data for a longer period, from 1979–2012 in the US, Autor et al. (2016) found some positive effects of increased minimum wages on wage inequality at the bottom end of the wage distribution but limited

⁵⁹ Such as *Econometrica*, *Journal of Labor Economics*, *The Economic Journal*.

⁶⁰ Such as the semiparametric kernel density method and counterfactual wage distribution methods.

⁶¹ See also Chapter 4 for a more detailed analysis of the relation between industrial relations systems and wage and earnings equalities.

evidence of spillover effects. Confirming the results of Lee (1999), the decline of the real value of MW in the US between 1979 and 1989 explains a significant part – around 50% – of the increase in wage inequality in the lower tail of the wage distribution for both male and female workers. For the full sample period (1979–2012), the results are more mitigated: the decline of the real value of SMW made a meaningful contribution to the increase in female wage inequality but a negligible contribution to male wage inequality in the lower tail of the wage distribution. Cengiz et al. (2019), using a difference-in-differences approach, estimate the effect of 138 prominent MW changes between 1979 and 2016 on low-wage jobs. The authors found that the overall number of low-wage jobs remained essentially unchanged over the five years following the increase of MW. Furthermore, wage inequality at the bottom end of the wage distribution was reduced and the direct effect of MW on average wage and wage inequality was amplified by modest wage spillovers at the bottom of the wage distribution.

In the UK, Machin and Manning (1994) also provide convincing evidence that the decline in the real value of the minimum wage during the 1980s accounted for a significant part of the growth in wage inequality at the bottom end of the wage distribution. More recently, exploiting the history of minimum wage legislation in the UK, Dickens et al. (2012) concluded that while the SMW had no effect on employment it had a strong effect on the lower tail of British wage distribution, and explains a substantial part of the reduction of wage inequality between 1998 and 2010 among low-paid workers. They show also that the SMW in the UK pushed up wages of workers as high as the 35th percentile in the overall wage distribution, implying some positive spillover effect, particularly for women.

According to Gautier and Laroche (2018), few studies have been conducted in France to assess the impact of MW on wage inequality. The first study analysed the impact of increase of MW between 2005 and 2008, the second between 2007 and 2012, both using quantile regression techniques. For the first period the increase in the MW lead to significant reduction in wage inequality at the bottom end of the wage distribution and positive spillover effects (up to the seventh decile for men and up to the fifth decile for women, due to some form of indexation mechanism for workers covered by collective agreements in France). The second study, analysing the period 2007–2012, found that a one percent increase in the minimum wage increased wages in the lowest decile of the distribution by about 0.6%, the impact declining over the wage distribution and disappearing from the eighth decile, also implying some strong spillover effects. There are reasons to think that this large spillover effect above the median wage reduced the equalizing effect of higher SMWs in France.

Analysing the impact of the introduction of a SMW in Germany in 2015, Caliendo et al. (2019) show that one to two years after its introduction, hourly wages at the bottom of the distribution had substantially increased. In

spite of evidence of non-compliance,⁶² they show that employees who seem to have benefited the most are low-educated, low-skilled workers, the marginally employed, women, and people with a migration background. In other words, the fact that the MW has had a positive impact on hourly wages in the lower tail of the wage distribution indicates that the introduction of a MW in Germany reduced wage inequality, particularly for these demographic groups. In contrast to the evidence from France, Caliendo et al. (2019) do not report strong evidence for spill-over/ripple effects to higher wage groups after the introduction of MW in Germany.

Overall, the review of empirical studies of the impact of MWs on the wage distribution suggests that an increase in SMW significantly increases the wages of low-paid workers and provides strong evidence that SMW, by compressing the wage structure at the bottom end of the wage distribution, reduces wage inequality, in particular for women, who tend to be over-represented at the lower end of the wage distribution.

However, the impact of SMW on individual labour earnings and labour earning inequality are more complex and depends *inter alia* on the impact of SMW on employment and working hours of low-paid workers. The equalizing impact of MW hikes on the distribution of labour earnings was during the 1990s and still today the subject of controversy. Neumark and Washer (2008) reviewed the literature on the impact of a variation of MW on labour earnings of low-wage workers in the US. According to the authors, even though low-wage workers experience wage gains as a result of minimum wage increases, they may also experience declines in employment and working hours. The reported estimates point to a moderate contemporaneous decline in hours for workers paid at or below the minimum, but little evidence of statistically significant effects on hours worked by those paid more than 20% above the minimum wage.

According to Belman and Wolfson's (2014, 183–257) literature review of the impact of MW on labour earnings, although the results are not one-sided, the preponderance of evidence is that higher MW raise the wages of workers at the MW level and of workers who had previously been earning above but close to the new MW, particularly for women. Average labour earnings are almost always estimated to rise in response to increases in MW. Even where higher minimum wages are found to cause the loss of jobs, large majorities of workers at the MW level benefited from the increase in the minimum wage. The impact of spillover varies considerably between the reviewed studies, but they may reach as high as or beyond the 20th percentile of the wage distribution. In other words,

⁶² Caliendo et al. (2019) report that at least 750,000 eligible employees were still paid less than the minimum wage in 2016. Bosch et al. (2023) also reveal large problems of non-compliance of MW in Germany. It should be noted that the MW law provided some exemptions for some employers and type of workers.

the review of literature for the US and the UK shows that an increase of MW has a clear equalizing effect, reducing labour earning inequality particularly for women.

As noted by Card and Kruger (2017), one important, controversial aspect of their 1995 book *Myth and Measurement* book concerned the equalizing effect of higher minimum wages. According to the architects of the New Minimum Wage Research, an increase in minimum wages leads to not only reductions in wage inequality but to an increase in labour earnings and incomes for lower-income workers and households. Card and Kruger (2017) remark that a large proportion of US economists in the 1970s and 1980s thought that the elasticity of demand for workers affected by minimum wages was less than -1, so any increase in the MW would *reduce* the total labour earnings received by these workers, causing an increase in earning inequality. As stressed by Card and Krueger (2017, 829):

In view of the evidence now available, this appears to be extremely unlikely. Indeed, most of the subsequent literature found substantially larger effects of the minimum wage on reducing inequality than we found [...]. Two decades ago, many economists also believed that any earnings gains arising from a minimum wage increase would accrue to secondary earners in wealthy families. As we noted in *Myth and Measurement*, this was not true in the early 1990s, and today even larger shares of low-wage workers live in low-income families and the positive distributional effects of a rise in the minimum wage are clearer.

In his recent review of literature Dube (2019) shows that, overall, the most up-to-date body of research from the US, UK and other developed countries points to a very modest effect on employment of moderate increases in MWs, up to 60% of average wages, while significantly increasing the earnings of low-paid workers. In other words, moderate increases in the MW seem to have not only an equalizing effect on wages but even on the labour earnings distribution, due to the negligible impact on employment and working hours for both men and women. However, Caliendo et al. (2019) report that even though the introduction of the SMW in Germany 2015 did not have, in the short run, a negative impact on the level of employment of low-paid workers, the reform lead to a reduction in working hours such that labour monthly earnings for low-wage workers increased less than hourly wages.⁶³

The distributional impacts of an increase of MW on household income distribution is still subject to some controversy even if the more recent evidence from the US (see the quotation from Card & Krueger 2017, above) reveals positive distributional effects of a rise in MW. As noted previously, the impact of

⁶³ Caliendo and Wittbrodt (2022) report that in Germany the impact on working hours was limited to a reduction of contractual hours but not actual hours, which instead increased.

a minimum wage on the distribution of household⁶⁴ income depends on where the beneficiaries of SMW are located in the household income distribution as well as on the structure of the tax and benefit system of the country considered. As noted by Cengiz et al. (2019), the poverty-reducing effects of the minimum wage are expected to be small if the negative impact of the increase of MW is substantial or if most minimum wage workers are higher up in the household income distribution. Using quantile regression techniques and data from the US Current Population Survey from 1993 to 2013, Cengiz et al. found robust evidence that higher MW in the US lead to increases in incomes at the bottom of the household income distribution. Regarding the poverty rate, Dube found statistically significant long-run MW elasticities ranging between -0.22 and -0.46 from the classic two-way fixed effects model to a model with a rich set of controls for trends, regional shocks, and business cycle heterogeneity. Although the poverty rate is arguably an unclear measure for assessing the distributional effects of the minimum wage, the study by Cengiz et al. (2019) confirms that minimum wages have a poverty-reducing effect in the US.

Few empirical studies have analysed the impact of the variation of MW on in-work poverty⁶⁵ and household income distribution in the EU. As noted by Lucifora and Salverda (2008), the complex interlinkage between household income, wages and poverty raises some important questions regarding the relationship between household income inequality and wage inequality. A low-paid worker may be part of a household that is not poor. Although the two are often related they are by no means identical – a low-paid worker's household may not be poor, and the wage of a worker in a poor household may be well above the low-pay threshold. The low-paid jobs of second earners, who are to a larger extent still women, may actually lift a household out of poverty (Lucifora & Salverda 2008).

A European comparison of household income distribution and the incidence of low-wage workers show that the share of low-paid workers significantly exceeds the incidence of working-poor households in the EU. The fact that the share of low-paid workers exceeds the share of in-work poor households implies that a significant proportion of low-wage earners must be part of dual-earner or multi-earner households that are not poor (Salverda 2016). In other words, a large share of individuals paid at, or slightly above, the MW may belong to non-working poor households. If, as seen previously, there is strong evidence that an increase of MW reduces wage inequality at the lower end of the wage distribution the impact of a rise of MW on household income distribution is not clear-cut, since

⁶⁴ In 2016, the Federal Poverty Threshold (FPT) ranged from \$12,316 for a 1-person household under 65 years of age up to \$32,631 for a 6-person household with 3 children under age 18.

⁶⁵ Working poor are defined and measured as individuals whose household equivalised disposable income is below 60% of the median disposable income in the country. Low pay is defined by two-thirds of the median wage.

low-paid jobs have spread widely and even become more important in the upper part of income distribution than at the bottom (Salverda & Rook 2023). As stressed by Marx and Nolan (2012), the fact that most low-paid workers, i.e. women, in the EU are not the principal earners in the household where they live, and thus not in poor households, means that increases in MW even in the absence of possible negative effects on employment may have a relatively limited impact on poverty and income distribution, with most of the benefit going to non-poor households.

Atkinson et al. (2019), using the EUROMOD simulation model,⁶⁶ analysed the impact of a substantial increase of MW in the UK on household income distribution. The results of the simulation show that such an increase has only a very modest impact in reducing income inequality or poverty reflecting the fact that low-paid employees are spread across the whole household income distribution rather than concentrated towards the bottom end of the distribution. Atkinson et al. (2019) also show that, for a substantial number of those affected by the increase of MW, much of the benefit of a higher wage is lost due to the withdrawal of means-tested social benefits.

In its pre-assessment of the Minimum Wage Directive, the EU Commission, using EUROMOD, analysed the consequence of an uprating of SMW in the EU complying with the highest reference values, namely 50% of the national gross average wage or 60% of the gross median wage. Contrasting with the above-described UK study, the simulation shows that a substantial increase of MW significantly reduces wage inequality and in-work poverty. According to the simulations, the average reduction in wage inequality is estimated to range between 8 and 10% while the average decline in in-work poverty is estimated to range between 12 and 13%, in accordance with the most recent US studies.

3.4 Empirical Evidence on the Impact of MW on the Gender Wage Gap

There is a large and growing literature explaining the cause and evolution of the gender wage gap (see, for example, Rubery & Grimshaw 2015 and Blau & Kahn 2017 for a recent review of the literature). The objective here is not to explain the cause or examine cross-country differences in the gender wage gap but to assess the relationship between SMW and the gender wage gap. In other words, to analyse the potential impact of variation of SMWs on the gender wage gap. The reviews of empirical literature have shown that women are overrepresented among low-paid and MW workers and have benefited the most of an increase of MW. A SMW can therefore provide an important counterweight to gender inequities in pay and employment (Rubery & Grimshaw 2009).

⁶⁶ EUROMOD is a static tax-benefit micro simulation model which simulates the tax and benefit system of each EU Member State.

As mentioned in Chapter 2, if one important aim of the MWD is to reduce the overall wage inequality in the lower tail of the wage distribution, another explicit objective is to contribute to closing the gender wage gap.

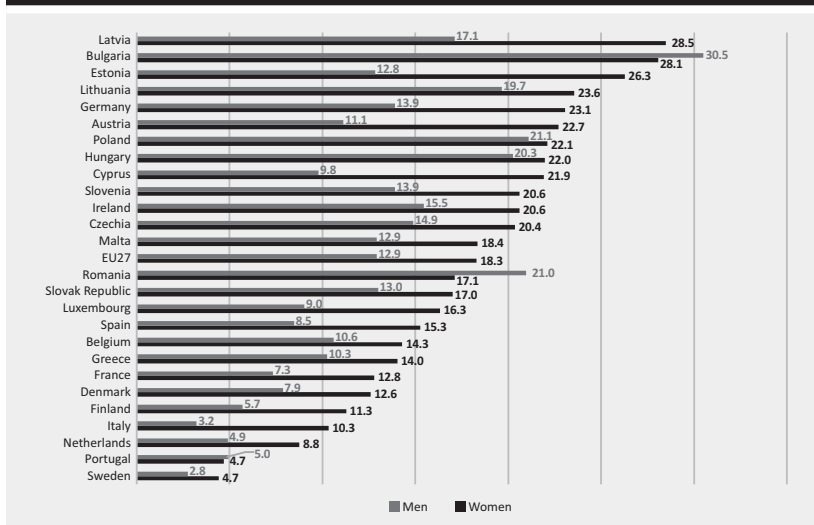
As shown by Figure 3, with the exception of Bulgaria and Romania, the incidence of female low-paid workers is higher than male in all EU Member States. The share of low-paid female workers ranges from 4.4% in Sweden to 28.5% in Latvia. The incidence of low-paid female workers is significantly above the EU average in the Baltic countries and Central and Eastern European Member States, but also in Austria and Germany. It should be noted that the incidence of female low-paid workers, with the exception of Austria, is significantly lower in countries where wage floors are determined by collective agreements such as the Nordic countries and Italy⁶⁷ (see Chapter 4 for an analysis of industrial relations systems, wage setting and gender inequalities).

In the previous section, the review of empirical studies of the impact of MWs on the wage distribution has shown that an increase in the SMW significantly increases the wages of low-paid workers. These empirical studies also provide strong evidence that SMW, by compressing the wage structure at the bottom end of the wage distribution, reduces wage inequality. The fact that women are overrepresented in low-wage sectors indicates that an increase of SMW will to a large extent benefit women at the lower end of the wage distribution. However, the above-mentioned evidence was based on countries with regional or demographic group variations in SMW. In a recent paper, Joe and Moon (2020) investigate the impact of the effective minimum wages on wage inequalities in OECD countries. Using a country panel that allows for both cross-sectional and time-series variations in minimum wages, their results confirm previous findings that increases in MW alleviate the wage inequality at the lower tail of the wage distribution, while having little effect at the upper tail. The estimated effect is larger for women than for men, which is consistent with the fact that the share of workers who are directly affected by the changes in minimum wage is larger among women than men. The fact that the magnitude of the impact is higher for women implies that increasing the SMW may reduce the gender wage gap.

As shown by Figure 4, the non-adjusted gender wage gap varies considerably among EU Member States, ranging from 1.2% in Belgium to 24% in Latvia. A comparison between Figures 3 and 4 shows that countries with a high incidence of female low-paid workers also display a high gender wage gap. It should be noted that even if the correlation between the incidence of female low-paid workers and the gender wage gap is positive, it is relatively low (0.30).

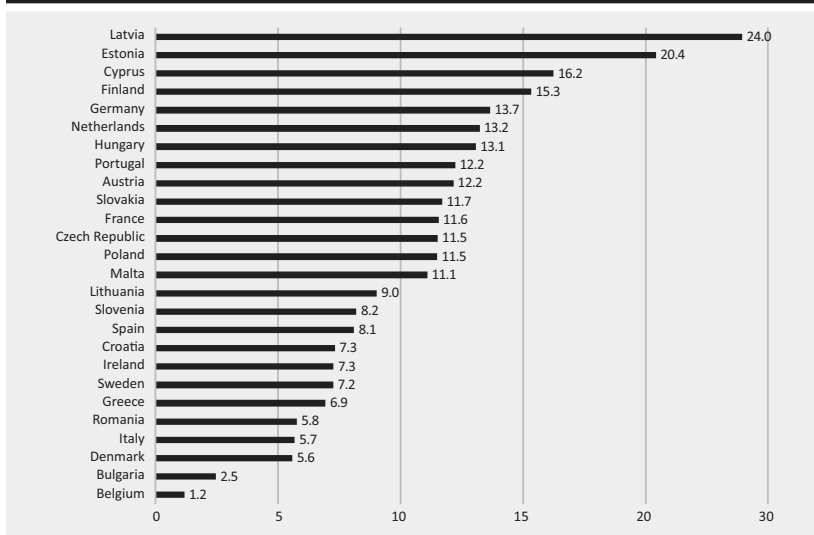
⁶⁷ It should be noted that for Italy the comparatively lower gender wage gap is mainly due to a selection effect. The significantly lower share of women participating in the labour market means that female workers characteristics do not differ from their male counterparts. In terms of disparities in gender equality, a better cross-country indicator would be the gender gap in earnings and income, taking into account the cross-country disparities of employment rates between men and women.

Figure 3 Incidence of low-paid workers by gender (%), 2021 or latest available year.



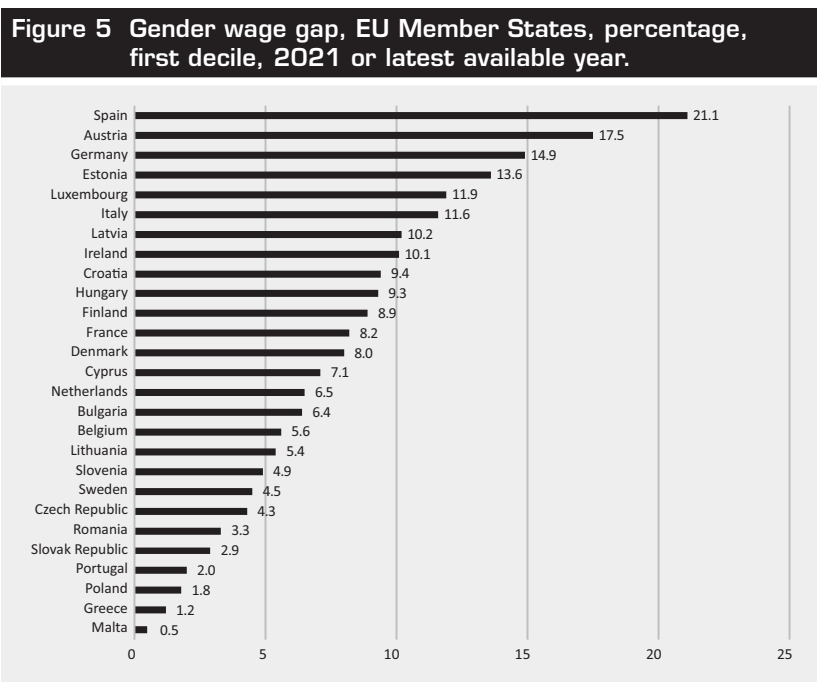
Notes: The incidence of low pay refers to the share of dependent employees earning less than two-thirds of median earnings. Data refer to full-time employees and gross labour earnings, that is, before the deduction of income tax and social security contributions payable by the employee. Source: OECD (2013a) and own calculations.

Figure 4 Overall gender wage gap, EU Member States, percentage, 2021 or latest available year.



Note: OECD defines the gender wage gap as the difference between median earnings of men and women relative to median earnings of men. Data refer to full-time employees. Source: OECD (2023) and own calculations.

Since we are concerned here with the bottom end of the wage distribution where women are overrepresented, Figure 5 displays the gender wage gap at the first decile, where the impact of a variation in the SMW can be expected to be the greatest.



Note: OECD defines the gender wage gap as the difference between median earnings of men and women relative to median earnings of men at the first decile. Data refer to full-time employees.
Source: OECD (2023) and own calculations.

As Figure 5 shows, there is considerable variation in gender pay gaps among the lowest paid workers, ranging from 21% in Spain to 1.2% in Greece. On average the gender wage gap is lower at the bottom end of the wage distribution. The ranking of countries is also different, with Spain, Austria, Germany and Estonia displaying the higher gender wage gap at the bottom end of the wage distribution (more than 10%). It is also worth noting that in Spain the gender wage gap is significantly higher at the bottom end of the wage distribution compared to the wage gap for the whole distribution (a difference of 13 percentage points). It is also higher, though to a lesser extent, in Italy, Austria, Belgium and Bulgaria. The combination of a high incidence of female low-wage workers and a high wage gap at the bottom end of the wage distribution, such as in Austria, Germany, Latvia and Estonia, implies that the impact of an upgrading of SMW for these countries on the gender wage gap can be expected to be larger compared to Member States with both a lower incidence of female low-paid workers and a lower gender wage gap, such as in Portugal, the Netherlands or France.

Few empirical studies have been conducted to assess the extent to which an increase of the SMW reduces the gender wage gap at the bottom half of the wage distribution. One of the first papers analysing the impact of SMW on the gender pay gap was carried out in the UK at the turn of the century. Dex et al. (2000) explored the implications of alternative policies on gender wage inequality and found that the introduction of the SMW in the UK increased the wages of women at the bottom half of the wage distribution and contributed to narrowing the gender wage gap. Using regional data, Robinson (2005) also analysed the impact of the introduction SMW in the UK on the gender wage gap. The variation in the share of low-paid workers across regions in the UK provides a “quasi-natural” experiment making it possible to identify a potential causal effect of the SMW and the gender pay gap. Using a difference-in-differences approach Robinson shows that the introduction of the SMW narrowed the gender wage gap by around 2 percentage points in regions where the share of low-paid women was more significant and where the difference between the SMW and the hourly wage before its introduction was larger. Bargain et al. (2018) examine the change in the gender wage gap around the introduction of minimum wages in Ireland and the UK. Using survey data for the two countries, the authors develop a decomposition of the change in the gender differences in wage distributions around the date of introduction of minimum wages. By separating “price” effects attributed to minimum wages from “employment composition” effects, they observe a significant reduction of the gender pay gap at the bottom end of the wage distribution after the introduction of the minimum wage in Ireland while there is hardly any change in the UK. Counterfactual simulations show that the difference between the two countries may be attributed to gender differences in non-compliance with the minimum wage legislation in the UK. In a recent study, Blau et al. (2023) analysed the potential impact of an increase of the SMW on the gender, racial and ethnic group wage gaps in the US. As pointed out by the authors, given the disproportionate location of women and disadvantaged racial and ethnic groups (African Americans and Hispanics) at the lower end of the wage distribution, an increase in MW may be an efficient policy instrument for narrowing these wage gaps, supplementing more “group-specific” approaches such as anti-discrimination policies. Focusing on the gender wage gap, the results of estimations show that the variation of MW in the US between 1979 and 2019 reduced the gender pay gap up to the second decile. Using a simulation approach based on the 2015–2019 periods, the authors found that the sizeable increase in hourly SMW to \$12 significantly reduced the gender wage gap in the lower tail of the wage distribution, implying that MW policy is a potentially suitable policy instrument to reduce wage inequality between men and women, and also among ethnic and racial groups.⁶⁸

⁶⁸ The authors predict that an increase in MW of this magnitude would reduce existing between-group (Gender, Black-White, White-Hispanic) wage gaps below the 15th percentile by between 25 and 50% (Blau et al. 2023, 38).

Two recent studies analyse the impact of the introduction of the SMW on the gender wage gap in Germany. Germany is an interesting case study since it has, as has been shown, a rather high gender wage gap at the lower tail of the wage distribution and has set the SMW at a relatively high level, affecting more than four million employees. Boll et al. (2015) use a simulation model to assess the potential effects of the introduction of SMW in Germany. In their first scenario, which assumes that the SMW has no impact on employment, the gender pay differential is reduced by 2.5 percentage points, from 19.6% to 17.1%. When assuming a negative effect on employment, the gender wage gap is reduced by a further 1.2 percentage points. However, this comes at the cost of job losses which affect women more strongly than men. The magnitude of job losses ranges between 0.2% and 3.0% of all employees. Based on individual data from the Structure of Earnings Survey, using a difference-in-differences framework and exploiting regional differences in the Kaitz index,⁶⁹ Caliendo and Wittbrodt (2022) found significant negative effects of the MW on the gender wage gap. Between 2014 and 2018, the gap at the 10th percentile of the wage distribution was reduced by 4.6 percentage points (or 32%) in regions that were strongly affected by the minimum wage compared to less affected regions. For the gap at the 25th percentile, the effect still amounted to -18%, while for the mean it was smaller (-11%) and not statistically significant.

Majchrowska and Strawinski (2018) analysed the effect of significant increases in the minimum wage in Poland in 2008–09 on gender wage gap. To assess the potentially differentiated effects throughout the wage distribution, the authors analyse the impact of minimum wage increases separately for different age and educational groups. Combining a non-parametric approach with the so-called Oaxaca-Blinder decomposition, the results indicate that a significant reduction in gender wage gaps observed among younger workers in Poland in 2006–2010 could be attributed to an increase in the MW level. The effects of minimum wage increases were negligible for middle-aged workers. Changes in gender wage gaps between educational groups were much smaller. The results confirm that minimum wage policy could be an appropriate tool for decreasing the existing differentials in pay between men and women, in particular among low-paid workers.

Overall, the reviewed empirical studies show that an increase of SMW can indeed contribute to reducing gender wage disparities, consistent with the objective of the Minimum Wage Directive and with the results of the EU Commission's pre-assessment findings. Using the EUROMOD micro simulation model, the model simulation shows that the gender pay gap between average wages of men

⁶⁹ The Kaitz index is an indicator commonly used in international literature that measures the relative value of MW, as a percentage of the national average or median wage. It is also used in the MWD as a reference value for the setting of adequate MW, at 60% of the median wage or 50% of the average wage (see Chapter 2).

and women declines in all EU countries as the minimum wage increases. For the EU as a whole the decrease of the gender wage gap is expected to be around 5%. In a scenario where minimum wages are set at 60% of the median wage, the gender wage gap declines by more than 20% in Greece and by more than 10% in Spain, Romania and Slovakia. In a scenario in which minimum wages are set at 50% of the average wage, the gender wage gap declines by 25% in Romania and by more than 10% in Greece, Luxembourg, Poland, and Slovakia (European Commission 2021).

4 Statutory Minimum Wages, Industrial Relations Systems and Wage Formation

In addition to promoting the setting of adequate statutory minimum wages in the EU, one crucial component of the Directive is to strengthen social dialogue and to promote collective bargaining on wage setting in the European Union as well as to actively involve the social partners in the uprating of the SMW. In this chapter we analyse the relationship between industrial relation systems, collective bargaining and the MW. Along the lines developed by Grimshaw et al. (2014), we analyse the extent to which the industrial relations system, in particular the extent of collective bargaining coverage and the balance of power between social partners, interacts with MW policy to influence the wage structure and pay equity outcomes.

According to recent empirical evidence, employment performance and job quality are positively correlated with a specific type of Industrial Relations System (IRS) characterised by powerful and independent social partners playing a crucial role in establishing labour market norms/standards and shaping working and living conditions in both the public and private sector (Anxo 2021; OECD 2019; Vaughan-Whitehead et al. 2021). Two-tier, multi-employer collective bargaining systems that are centralised and coordinated while leaving room for self-regulated and organised decentralisation, and which are characterised by, firstly, high union density and coverage rate of collective bargaining⁷⁰ and, secondly, a balanced bargaining power between the two sides of industry, not only seem to favour gender wage and earning equality and equal opportunities between genders, and social cohesion, but also seem to deliver better outcomes in terms of employment, economic and productivity growth. As shown by the OECD (2019), the quality of the working environment also appears to be higher in IR systems with powerful and autonomous social partners and which have, on average, a high coverage rate of collective agreements. Therefore, social partners' governance of the labour market not only seems to better reconcile economic efficiency with social justice and gender equality than other systems, but also to be well adapted to provide effective and fair responses to the challenges linked to globalisation, demographic, technological and climate changes.

⁷⁰ "Union density" is commonly defined as the proportion of employees who are members of a trade union among all employees. "Collective bargaining coverage rate" is defined as the proportion of employees covered by collective agreements in force among employees with the right to bargain (Visser 2019).

Even though social dialogue and collective bargaining in EU Member States still play a crucial role in shaping the terms and conditions of employment, developments during the last two decades show a clear tendency towards an almost universal decline in union density, a decrease in employers' affiliation rates in some EU Member States, and a decline in the coverage rate of collective bargaining in both the public and private sector (but more acutely in the private sector). In other words, the last three decades have seen a clear decrease in the capacity of social partners to regulate the labour market and an increase in unilateral state intervention and deregulation of the labour market, leaving more scope to market forces and/or unilateral decisions of employers to determine pay and working conditions. These developments have led to a weakening of trade-union bargaining power, a decline in the wage share of national income, a rise in in-work poverty, and an upsurge in wage and income inequality. Against this background, the Minimum Wage Directive may be interpreted as an important step by the EU to reverse, or at least halt, the slide in collective bargaining coverage and to stimulate collective bargaining, especially in those countries where the slide has been most pronounced. The MWD can also be seen as an indication of the willingness of the European institutions to reduce growing inequalities by *inter alia* counteracting the weakening of social partners' labour market governance.

As described in Chapter 2, the two inter-linked objectives of the Minimum Wage Directive are to ensure adequate minimum wage levels, thereby enabling a decent living standard and to strengthen the capacity of social partners to shape working and living conditions by promoting social dialogue and collective bargaining. According to the Directive, Member States with a collective bargaining coverage rate below 80% will have to take action to support social partners to develop their capacity to engage in collective bargaining on wage setting, and to encourage constructive, meaningful, and well-informed wage negotiations. One crucial question is whether the MWD, as well as other recent EU legislative initiatives,⁷¹ will stimulate positive reforms at Member State level and reverse the decline in social partners' influence on labour market governance. The analysis of the institutional and legal frameworks surrounding and characterising the type of national IRS and its development over time enables us to identify both the obstacles to *and* the potential for achieving – as called for by the MWD – the effective involvement of social partners in wage setting, providing a fair wage that enables a decent standard of living for low-paid workers. Another aim of this chapter is to provide further evidence on the relationship between the type of IR system and wage and earnings inequality, with a particular focus on gender inequalities.

⁷¹ Such as the Directive (EU) 2019/1152 on Transparent and Predictable Working Conditions in the European Union, the Directive (EU) 2023/970 to Strengthen the Application of the Principle of Equal Pay for Equal Work or Work of Equal Value between Men and Women through Pay transparency and Enforcement mechanisms, and the Action Plan on the implementation of the European Pillar of Social Rights (EPSR) (see Chapter 2).

The representativeness of social partners and their capacity to shape the world of work varies significantly across EU Member States and is clearly related to the specificity and the development of national systems of industrial relations. We therefore start this chapter by identifying the main features and transformations of industrial relations systems and social dialogue during the last 30 years in Europe. We focus, firstly, on the development of social partners' representativeness during the last three decades, and secondly, we analyse the capacity of the social partners to autonomously shape employment conditions and to influence public policies, particularly regarding their involvement and influence in the setting of minimum wages. Special attention is given to the respective roles of the state/public authorities and social partners in regulating the labour market and the dominant types of collective bargaining systems (centralised or decentralised, sector, cross-industry, industrial or company level, scope of agreements, collective bargaining coverage, tripartite consultation mechanisms, etc.).

4.1 Industrial Relations Systems in the EU: Trends and Developments

4.1.1 Main Regimes of Industrial Relations in the EU

In spite of some common trends during the last three decades, namely a general decline in union density and a tendency toward the weakening, decentralisation, and fragmentation of collective bargaining, the industrial relations landscape in Europe remains diverse, with no clear pattern emerging of convergence towards a specific IR model. In order to provide an overarching view of developments of industrial relations systems in Europe and to explore the main causes of their transformations, we cluster them in broad categories according to their institutional settings. Along the lines developed by Crouch (2014), Müller et al. (2019), OECD (2019), Visser (2012, 2016, 2019a) and Vandaele (2019), we group the various national IR systems according to four dimensions:

- i) The representativeness of social partners (union and employer density)⁷² and their capacity to autonomously regulate the labour market and to shape the world of work; the distinctive role of public authorities, social partners and market forces in producing labour market norms and regulation, in other words to identify the predominant types of labour market governance: market-based, state-regulated or regulated through collective agreements.
- ii) The main features of the collective bargaining system, in particular the predominant bargaining regime (single or multi-employer bargaining) and the level at which collective agreements are negotiated (national/cross-sectoral, industry or firm level), i.e. the extent of centralisation of the bargaining system, but also the existence, or not, of statutory/administrative extension

⁷² As an implicit indicator of social partners' representativeness we use trade unions' and employers' density as well as social partners' ability to conclude collective agreements (measured by collective agreements coverage). Representativeness criteria differ across EU Member States.

mechanisms, *erga omnes* rules,⁷³ as well as the possibility of derogating or opting-out that all affect the coverage rate of collective agreements.

- iii) The extent of co-ordination between, and within, social partners' organisations and the articulation between the various bargaining levels.
- iv) The type of labour relations: the relative bargaining power of the two sides of industry, the frequency of labour disputes and conflicts in the labour market (i.e. consensual versus conflictual labour relations), the level of trust between social partners, and the quality of the social dialogue, in particular the relationship between public authorities and social partners (government attitudes toward social partners).

The data used for clustering the various IR systems in broad categories come mainly from a survey conducted by the OECD in 2018 (OECD 2019) on the main institutional characteristic of IR systems in OECD countries and from various indicators regarding union employer density and collective bargaining coverage rates available in the Database on Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts (ICTWSS) of the Amsterdam Institute for Advanced Labour Studies of the University of Amsterdam (Visser 2019; OECD/AIAS 2023). Table 1 displays our country clusters according to the four above-described IR dimensions.

As shown by Table 1, five broad groups of countries can be distinguished, with the traditional two polar cases represented by Nordic and Central and Eastern European countries. Belgium and the Nordic countries have IR systems characterised by multi-employer bargaining, with industry the main level at which collective agreements are concluded, but which also allow organised decentralisation. This makes it possible to adapt the content of sectoral collective agreement to local conditions. In these countries there is a high degree of co-ordination, high union and employers' density and a high coverage rate of collective bargaining. The Central and Eastern European countries, on the other hand, are characterised by single employer bargaining with collective agreements predominantly concluded at company level. In these countries there is little coordination, low union density and a relatively low employers' affiliation rate, as well as a low coverage rate of collective bargaining. France and most of the Southern European countries are characterised by centralised but weakly co-ordinated collective bargaining, with multi-employer collective agreements predominantly concluded at the industry level. Administrative extension mechanisms are frequently used and there are limited possibilities for derogations from the industry level collective agreement. Union density is

⁷³ Here we distinguish between *statutory extension mechanisms* implying that collective agreements are extended to a whole sector/industry, i.e. an extension of collective agreements beyond the signatory parties, in particular to firms not affiliated to the signatory employer organisations, and *erga omnes* rules implying that the concluded collective agreements apply even to employees who are not members of the signatory trade unions.

Table 1 Collective bargaining systems and clustering of current and former EU Member States.

	<i>Dominant bargaining regimes</i>	<i>Predominant level at which collective agreement are concluded</i>	<i>Degree of centralisation/ decentralisation</i>	<i>Extent of co-ordination</i>	<i>Trade union density</i>	<i>Employer density</i>	<i>Collective bargaining coverage rate</i>
A. Nordic and Ghent system countries							
Finland	MEB	Industry	Organised decentralisation	High	55–60%	60–70%	80–90%
Denmark	MEB	Industry	Organised decentralisation	High	55–65%	60–70%	80–90%
Sweden	MEB	Industry	Organised decentralisation	High	65–70%	80–90%	>90%
Belgium	MEB	Industry	Organised decentralisation	High	55–60%	70–80%	90%
B. Central and Eastern European countries							
Estonia	SEB	Company	Decentralised	No	< 5%	20–30%	15–20%
Lithuania	SEB	Company	Decentralised	No	5–10%	15–20%	5–10%
Latvia	SEB	Company	Decentralised	No	10–15%	40–45%	10–15%
Poland	SEB	Company	Decentralised	No	10–15%	5–10%	10–15%
Hungary	SEB	Company	Decentralised	No	5–10%	15–20%	20–25%
Czech Republic	SEB	Company	Decentralised	No	5–10%	40–45%	25–30%
Bulgaria	Mixed	Industry /company	Partially decentralised	No	10–15%	25–30%	20–25%
Romania	Mixed	Industry /company	Disorganised decentralisation	No	15–20%	10–15%	20–25%
Slovak Republic	MEB	Industry	Organised decentralisation	No	10–15%	30–40%	25–30%
C. English-speaking liberal market oriented and company bargaining level countries							
United Kingdom	Mixed	Company	Partially decentralised	No	10–20%	30–40%	20–30%
Ireland	Mixed	Company	Organised decentralisation	No	25–30%	60–70%	40–50%
Malta	Mixed	Industry /company	Partially decentralised	No	40–45 %	55–60%	45–50%
D. Southern European countries							
Spain	MEB	Industry	Disorganised decentralisation	Low	10–15%	70–80%	70–80%
Portugal	MEB	Industry	Disorganised decentralisation	Low	10–15%	60–70%	60–70%
Italy	MEB	Industry	Organised decentralisation	Low	30–35%	60–70%	90–100%
France	MEB	Industry	Organised decentralisation	Low	5–10%	70–75%	90% or more
Slovenia	MEB	Industry	Organised decentralisation	No	20–25%	50–60%	60–70%
Croatia	Mixed	Industry /company	Partially decentralised	-	15–20%	50–55%	45–50%
Cyprus	Mixed	Industry /company	Disorganised decentralisation	-	40–45%	60–65%	40–45%
Greece	SEB	Company	Disorganised decentralisation	No	15–20%	50–60%	40–50%
E. Northern and Central European countries							
Germany	MEB	Industry	Organised decentralised	High	10–15%	60–70%	50–60%
Netherlands	MEB	Industry	Organised decentralised	High	10–15%	80–90%	80–90%
Austria	MEB	Industry	Organised decentralised	High	25–30%	90% or more	90% or more
Luxembourg	Mixed	Industry /company	Partially decentralised	No	25–30%	80–90%	50–60%

Note: *MEB*: Multi-employer bargaining. *SEB*: Single employer bargaining.

The EU-countries in bold (1st column) do not have Statutory Minimum Wages, but wage floors determined via collective agreements.

The Ghent IR systems include the Nordic countries and Belgium. In these countries the unemployment insurance system is based on voluntary membership in unemployment insurance funds administered by trade unions and subsidised by the state. The name is derived from the Ghent municipal authority, which supplemented local trade union unemployment insurance schemes with public funds in 1901.

Source: Anxo (2021), ICTWSS database (OECD/AIAS 2023), Visser (2019) and own calculations.

low, but there is a relatively high rate of employer affiliation level and a high coverage rate. These countries are also characterised by frequent intervention by the state in the regulation of the labour market, and all except Italy have statutory minimum wages.

As well as describing the major developments and transformations of IR systems during the last decades in Europe, the aim here is to analyse the relationship between the type of IR system and the actual trends. Have some IR systems shown more stability and resilience? Has the tendency towards decentralisation of collective bargaining been more significant in systems that were already more decentralised and less coordinated? In other words, has the prevalent tendency of the last three decades towards a decline in union density, the weakening of collective bargaining, and the increasing role of unilateral state intervention in the labour market been more pronounced in some IR systems? Or, have some IR systems been more resilient in responding to market forces (globalisation and increased competition), to unilateral state regulation/intervention, and to technological changes (digitalisation)? Do we see some convergence towards a specific model of IR in Europe or has the basic landscape of IR in Europe, its diversity and heterogeneity, remained the same despite these common trends?

Such an analysis of the development of IR systems in Europe also allows us to identify whether the social partners and public authorities are aware of the nature of the problems regarding the development of their IR system as well as their political willingness to strengthen social dialogue. Hence, this analysis makes it possible to identify the policy responses and strategies, if any, implemented by public authorities, and social partners to strengthen the representativeness of the two sides of industry as well as to enhance social partners' capacity to shape the labour market in order to meet the major challenges confronted by modern economies (globalisation, demographic, technological and environmental changes).

The current heterogeneity of the IR systems in Europe, in particular regarding the extent of representativeness of social partners and their role regarding the regulation of employment relationships and conditions of work, implies that appropriate institutional reforms and strategies for promoting social dialogue and strengthening social partners' capacity to shape the labour market – as required by the Minimum Wage Directive – will differ significantly among EU Member States.

4.1.2 Main Development in European Industrial Relations: a Weakening of Social Partners' Labour Market Governance?

Since the turn of the century, union membership in the EU27 has shown a clear tendency to decline. While the total number of union members was around 55 million in 2000, it decreased to around 44 million in 2020 (OECD/AIAS

2023).⁷⁴ Large cross-country differences in union membership development can also be noted: the fall in membership has been particularly pronounced in Central and Eastern Europe but much less marked in Nordic countries. In a number of Member States, membership has been stable (Spain) or even increased slightly, as in France, and more significantly in Belgium, Luxembourg and Italy.

Looking at the development of union density in the EU as a whole we see more or less the same tendency. The overall rate of union density went from around 26 per cent in 2000 to 21 per cent in 2017. As shown by OECD (2019) this fall can hardly be ascribed only to demographic changes affecting the age and gender composition of the labour force or the employment structure (such as the decline of employment in manufacturing or in the public sector due to deregulation, privatisation and/or budget consolidation and the growth of private services) or the growth of small and medium enterprises less prone to being unionised or to joining employer federations. Recent empirical evidence for OECD countries (OECD 2019), does not indicate, either, that the decline in union density is linked to a declining propensity to unionise across generations and gender, but rather points to transformations in the world of work such as increased duality in the labour market due to an increase in marginal part-time, short-term contracts, solo and/or bogus self-employment, temporary agency jobs and platform work. In fact, the trust of young people towards trade unions in the EU is on average higher than among older adults (OECD 2019). Unfortunately, no cross-country comparative gender data are available for union density,⁷⁵ and it is therefore not possible to assess the extent to which the overall decline of union density is due to a stronger decline of female union density. However, there are reasons to think that part of the decline of union density is related to the fact that women are overrepresented among (marginal) part-timers, temporary contracts, bogus self-employed and platform workers; forms of work with lower level of unionisation.

Looking at the coverage rate of collective bargaining for the EU as a whole, around 55% of workers in the EU in 2021 (representing around 110 million workers) were covered by a collective agreement concluded at the national, industry or company level, indicating the crucial role of collective bargaining for the regulation of pay and working conditions in the EU (Visser 2019; Anxo 2021). Declining union density in Europe has been accompanied by a reduction in the share of workers covered by collective agreements, but as we will see below, the decline in the coverage rate of collective agreements has varied across EU Member States. And while we have seen a clear trend towards

⁷⁴ The above-mentioned decline of trade union density should be interpreted with caution since data for some EU countries are missing for some years. Restricting the analysis only for European countries with data for the whole period (18 countries, 2000–2019), trade union membership decreases from 42.8 million in 2000 to 39.7 million in 2019.

⁷⁵ An exception regards the Nordic countries. In the mid-2010s union membership and union density was higher for women than for men (Bergholm & Sippola 2022).

a decentralisation⁷⁶ of collective bargaining to lower levels in the last three decades, involving a shift from multi-employer to single employer bargaining regimes, there has been substantial variation among EU Members States (Visser 2016; Müller et al. 2019).

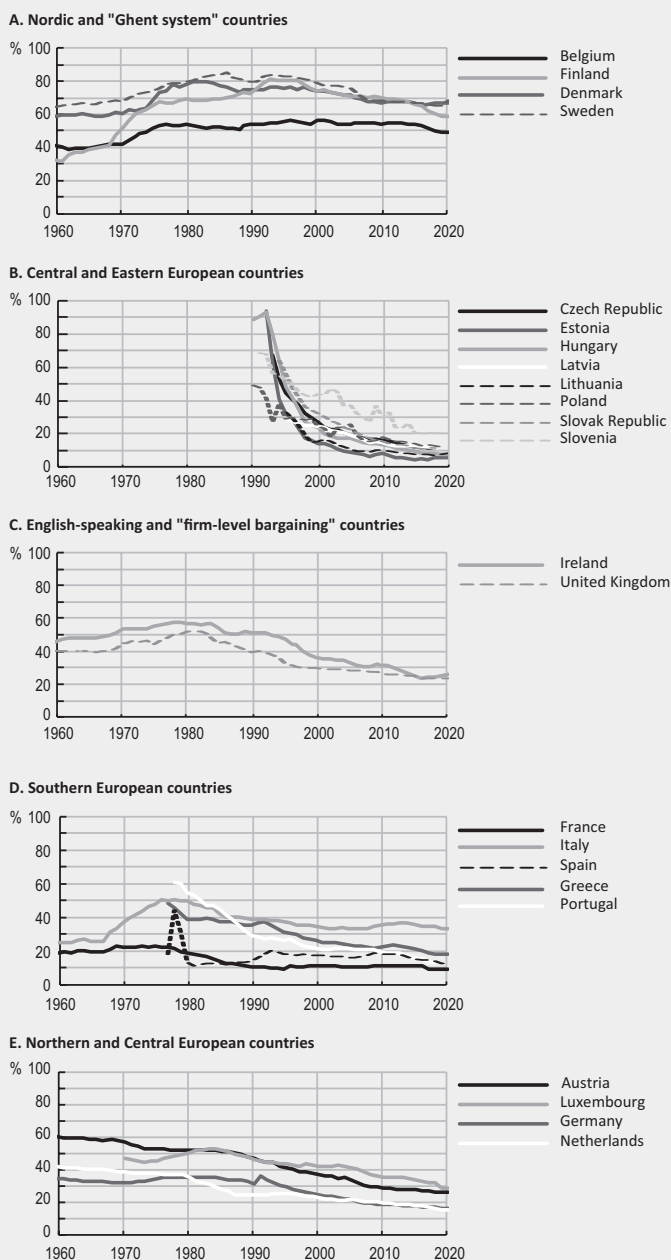
Indeed, all the headline trends described here – the decline in union density, the fall in the coverage rate of collective bargaining, and the tendency towards decentralisation of collective bargaining – hide large variations among EU Member States and groups of countries, as well as a variety of explanatory factors. Figures 6 and 7 show the long-term development of union density and the coverage rate of collective bargaining in our five-broad groups of countries classified according to the main characteristics of their respective IR system.

As shown in Figure 6, almost all EU Member States have experienced a decline in union density, and this decline has been particularly marked in Central and Eastern Europe.⁷⁷ However, some exceptions are worth noting. Belgium and Italy have maintained a somewhat stable union density at a relatively high level, as have France and Spain, although these have a much lower level of union density (see also Figure A2 and A3 in the Annex). As further shown by Figure 6, the timing of this decline differs considerably across the countries. While the reduction of union density starts already at the end of 1960s in Northern and Central Europe (with the exception of Germany where the decline coincides with re-unification), and around the mid-1980s in English-speaking and Southern European Countries, the Nordic countries continued to maintain a high and growing union density up to the end 1990s. The diversity in the temporality and the magnitude of the fall in union density indicates that the development and transformation of IR systems at the country level depends essentially on idiosyncratic political and historical factors. The causes for the decline in union density are multifaceted and there is no single story explaining the fall. To illustrate, the decline of union density in the UK is clearly related to the Conservative government's neoliberal and anti-union policies during the early 1980s. These reduced trade unions' scope of action, dismantled tripartite institutions and favoured market solutions and unilateral employers' decisions regarding the terms and condition of employment. Similarly, in the wake of

⁷⁶ Following Müller et al. (2019, 627) we define decentralisation “as the devolution of bargaining competences and regulatory capacity to lower levels.” It “can involve shifts from cross-industry to industry or company level, or, as is more often the case, from industry-level to company level bargaining.”

⁷⁷ The significant decline in union density in Central and Eastern European countries during the 1990s coincides with the end of the communist era. Independent trade unions were not a common feature of Central and Eastern European countries during the Soviet period, and the official trade unions' former allegiance to and collusion with the communist-totalitarian regimes explain the fall of membership following the collapse of Soviet Union and its satellites.

Figure 6 Trends in union density by group of countries, in percentage of dependent employees, 1960–2000.



Note: Union density: Proportion of employees who are member of a trade union among all employees.

Source: ICTWSS database (OECD/AIAS 2023) on trade union density and own calculations.

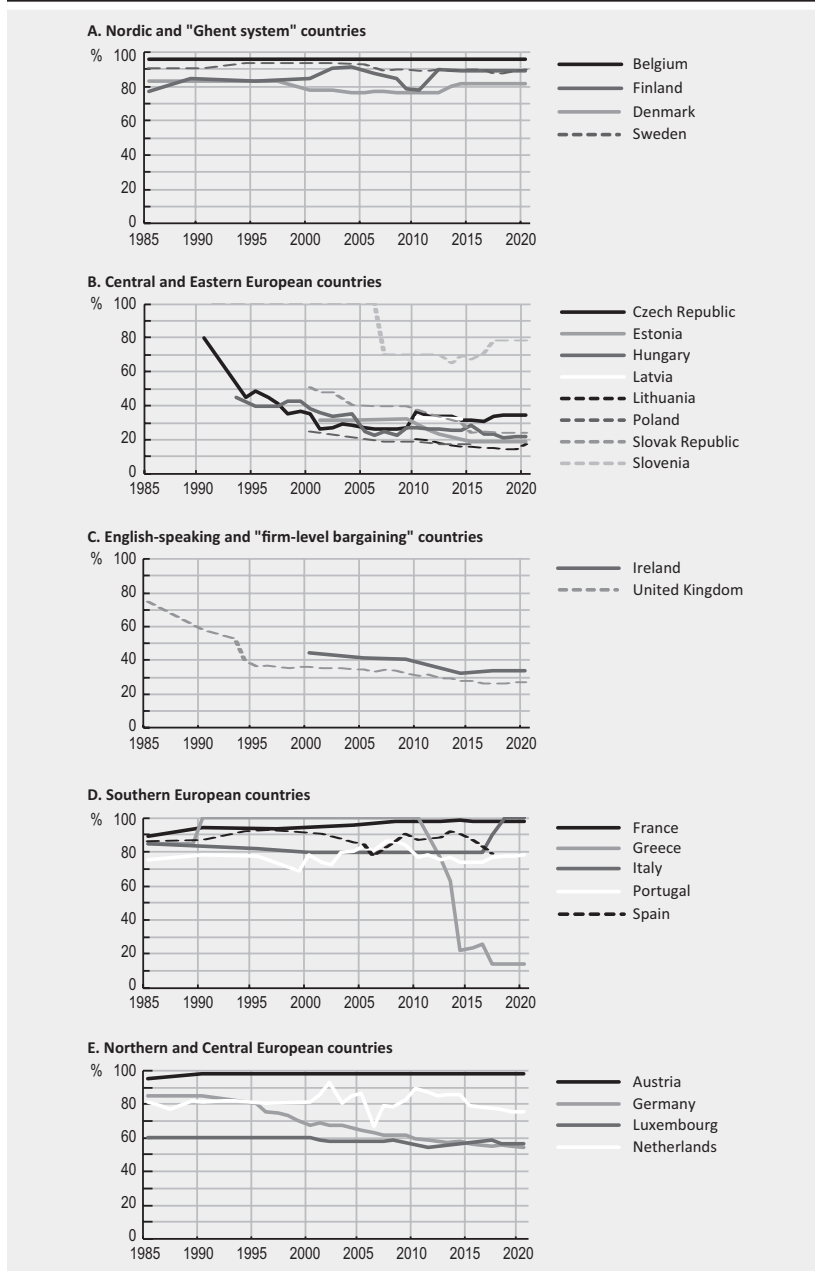
the 2008 global financial crisis, interventions by the “Troika”⁷⁸ in countries like Greece, Ireland and Portugal (the Troika considered multi-employer collective bargaining and trade unions as “institutional rigidities” hindering market-driven economic adjustment processes) laid the path for a decade of decentralisation of collective bargaining and a pronounced decline in collective bargaining rates. On the positive side, we may also explain the persistence of a high union density and high rate of bargaining coverage in the Nordic countries (and to some extent in Italy) by the mutual support of both sides of industry to the prevailing co-ordinated and centralised multi-employer bargaining system. It should be noted that the opposition of both the Danish and Swedish social partners to the EU Minimum Wage Directive is rooted in a distrust of state intervention in the labour market. Many actors view the EU initiative as a threat to the Nordic model of labour market governance in which labour market regulation is essentially the outcome of collective agreements.

As mentioned previously and noted by the OECD (2019), the fall in union density can hardly be attributed to an overall decline in the propensity to join a union, to the change in the demographic composition of the labour force or to common structural factors (such as modifications in the employment structure). Rather, there are strong reasons for thinking that the liberalisation of labour markets during the last three decades (illustrated by the growth of non-standard forms of employment such as temporary agency work, fixed-term contracts, zero-hour contracts, marginal part-time work, bogus self-employment and new forms of employment such as platform and crowd work, where women are overrepresented) may have contributed to the decline of union density. Reducing the attachment of workers to the labour market has limited opportunities for workers to join a union and the ability of unions to recruit them.

The development of collective bargaining coverage rates (see Figure 7) has been less dramatic, showing some stability over time, though with the exception of Central and Eastern European countries and Greece which have, as mentioned before, experienced a sharp decline in both union density and bargaining coverage rate. As shown in Anxo (2021), the ranking of countries regarding union density and coverage rate has almost remained unchanged between 2000 and 2020, implying a form of stability in the IR landscape in Europe. However, during this period, some polarisation of IR systems can be noted, with some

⁷⁸ The Troika refers to the demands made by the European Commission (ECOFIN), the European Central Bank (ECB) and the International Monetary Fund (IMF) to implement a strong austerity economic programme in the aftermath of the 2008 global financial crisis. The austerity packages required by the three institutions were particularly severe for Ireland, Greece, Spain and Portugal, comprising a restrictive fiscal policy, budget and wage cuts (freezing of statutory minimum wage) and reforms of the bargaining systems towards more decentralized systems.

Figure 7 Trends in bargaining coverage rates by group of countries, in percentage of employees with the right to bargain, 1985–2020.



Note: Collective Bargaining Coverage rate: Proportion of employees covered by collective (wage) agreements in force among employees with the right to bargain.

Source: ICTWSS database (OECD/AIAS 2023) on coverage rate of collective bargaining and own calculation.

level of stability and resilience among the Ghent/Nordic IR⁷⁹ systems but with a significantly higher share of Member States displaying both low union density and coverage rates of collective bargaining (see Figure A1 in the Annex).

Between 2000 and 2020, the fall in collective bargaining rates in Central and Eastern European Member States ranges from 7 percentage points in Latvia to 85 percentage points in Romania (see Figure A4 in the Annex). An exception among the Baltic countries is Lithuania, which has experienced an increase in the collective bargaining rate of almost 8 percentage points (an increase that took place mainly during the second half of the 2010s). It is also worth mentioning the decrease in the coverage rate of collective bargaining in the English-speaking countries and in Germany since the mid-1990s, as well as the dramatic fall in Greece (a drop of 86 percentage points between 2000 and 2020, see Figure A4 in the Annex). The decline in bargaining coverage in the UK is related to the decentralisation of collective bargaining first to an intermediate level (1987–1993), then to the company level. In Germany the decrease in collective bargaining coverage coincides with the changes in the early 1990s: the introduction of the first hardship agreement and “restructuring clauses”, and German reunification. The dramatic fall in Greece is related to the 2011 reforms which involved a radical decentralisation of wage bargaining (moving from a relatively centralised multi-employer system towards a decentralised system), in line with the Troika’s demands. Whereas Greece has experienced a dramatic transformation of the IR system during the last 15 years involving a decline of both union density and coverage rate of collective bargaining as well as a radical decentralisation of wage setting, the development in Germany has mainly involved a decline in union density and coverage rates,⁸⁰ indicating a transition from a Nordic IR system of social partnership to a hybrid, mixed system of social partners/state governance of the labour market, and as illustrated by the introduction in 2015 of a statutory minimum wage. The introduction of a minimum wage in the UK in 1998 also coincided with a decline in trade union membership, collective bargaining coverage and the aforementioned marked tendency to a decentralisation of wage setting, leading to a rise of wage inequality and in the numbers of low-paid workers and working poor.

From a gender perspective it should be noted that collective bargaining covers all workers independently of gender, ethnic origin and union membership. However there are gender effects: we may explain part of the decline of collective bargaining coverage rate in some EU Member States by the relative growth of female (and sometimes migrant) dominated low-paid sectors such as retail, hospitality and household personal services. These sectors are characterised by both a low rate

⁷⁹ The Ghent IR systems include the Nordic countries and Belgium. In these countries, unemployment insurance systems are based on voluntary membership in unemployment insurance funds administered by trade unions and subsidised by the state. The name is derived from the Ghent municipal authority, which supplemented local trade union unemployment insurance schemes with public funds in 1901.

⁸⁰ As well as a decline in employer density, see Figure A5 in the Annex.

of collective bargaining coverage and low unionisation. Another gender effect is that the decline of employment in male dominated manufacturing may also have contributed to the decline of collective bargaining coverage.

As shown by the previous analysis, the relative resilience of labour market governance systems based on collective agreements, as shown by the relative stability of employer density (see Figure A5 and A6 in the Annex) and the associated high rate of coverage of collective agreement in most Western European Member States contrasts with the almost universal fall in union density during the last two decades. This development indicates a shift in power resources and bargaining power between the two sides of industry in favour of employers. There are strong reasons to think that part of the growing wage inequality and the increase of the profit share of GDP in many countries is related to this development (see Keune 2021 and next section).

It should also be noted that the overall decline of union density and the tendency to decentralise collective bargaining to the company/workplace level during the last two decades coincides with a weakening of tripartite concertation, social dialogue and tripartite bodies, and of their capacity to influence the labour market and the regulation of employment relationships. This weakening has been particularly marked in Central and Eastern Europe during the 2010s where tripartite social dialogue (that in some cases generated general agreements regarding the terms and conditions of employment or established and updated statutory minimum wages) has been relegated to a mainly consultative process (Müller et al. 2019).

As noted in Chapter 2, the Minimum Wage Directive (Article 7) states that Member States shall take necessary measures to involve the social partners in the setting and updating of statutory minimum wages, the selection and application of criteria for the determination of the level of the statutory minimum wages, and in the choice of indicative reference values for the assessment of the adequacy of statutory minimum wages.

The extent to which, at present, social partners are involved in and can influence the setting of statutory minimum wages varies across the EU. In all EU Member States with universal statutory minimum wages, public authorities decide *in fine* the level of the statutory minimum wage, but most often after consultations with *ad hoc* tripartite bodies (all EU Member States except Belgium, Germany and France), expert committees (France, Germany, Ireland) or in some cases via formal bipartite or tripartite negotiations (see Table A3 in the Annex).⁸¹ According

⁸¹ As noted by Eurofound (2013), a clear-cut country classification is not easy, first because the minimum wage-setting process is multidimensional, and second because it is not always straightforward to assess whether a government decision reflects an agreement (not formal and not disputed) with the social partners or represents a unilateral decision taken after the social partners failed to agree. Similarly, it is not always entirely clear to what extent an exchange within a tripartite forum is tripartite or bipartite; in other words, the extent to which the government is taking part in negotiations between social partners.

to Eurofound (2023), an increasing share of EU Member States are following the recommendations of social partners or are applying bipartite or tripartite agreements regarding the level of statutory minimum wages. Only in Belgium are bipartite interprofessional negotiations between peak-level organisations an integral part of statutory minimum wage setting. In Estonia and Slovakia interprofessional bipartite agreements were reached in 2022 regarding the new minimum wage level. Tripartite agreements on the level of the minimum wage were also concluded in Hungary and Portugal in 2022. By contrast, in some EU Member States (Bulgaria, Czech Republic, Lithuania, Romania, Slovenia) the government consulted social partners, but because they did not reach an agreement, the government decided unilaterally on the level of the minimum wage. The remaining Member States have rule-based mechanisms, in which the level is determined according to more-or-less strictly defined formulas, or guiding rules (Luxembourg, the Netherlands, Poland) or they have expert committees leading the process (Croatia, Ireland, Greece, Spain), or a combination of both (France, Germany). Some countries also combine rule-based processes with social partner consultations or negotiations (Belgium, France, Poland, Slovenia). As noted by Eurofound (2023), recent increases in minimum wages were related to the upsurge of inflation in 2022, and in almost all Member States these increases took place outside the regular system of minimum wage-setting, and therefore with less social partner involvement. Notwithstanding these exceptions, it is noteworthy that since the early 2020s social partners have been more involved generally in determining the level of minimum wages. However, in spite of these positive developments, policy measures should be undertaken to reinforce the involvement of the social partners in the setting and updating of statutory minimum wages.

The MW Directive represents an opportunity to reinforce social dialogue and collective bargaining by involving social partners to a greater extent in the setting of minimum wages at the national level. However, counteracting the aforementioned negative tendencies in the development of IR systems, and achieving the required increase of collective bargaining rate up to 80% will constitute in many Member States a real challenge, one that demands strong willingness and a broad consensus among political actors to pursue in-depth modifications of their current IR system. This is particularly true among Central and Eastern European Member States but also in Greece and Ireland. Reaching the 80% target requires an increase of collective bargaining rate ranging from 67 percentage points in Poland to 45 percentage points in Czechia (see Figure 2). Only three countries with universal statutory minimum wages (France, Belgium, Spain) currently reach the threshold whilst all the countries with wage floors regulated by collective agreements (Austria, Italy and the three Nordic countries) have a bargaining coverage rate above the MWD's threshold.

Two main factors seem to govern the coverage rate of collective bargaining. The first factor is the dominant level at which collective agreements are negotiated.

As shown by Table 1, all Member States with a coverage rate of at least 80% have industry/sector multi-employers bargaining as the dominant level of collective bargaining. By contrast, Member States with a bargaining coverage less than 50% have a decentralised bargaining level at the company level. The second factor explaining a high coverage rate of collective bargaining is state support in form of extension mechanisms ensuring that agreements at the industry/sector level apply to all companies operating in the industry/sector. In the following section we examine the potential role of extension mechanisms for reaching the MWD target.

4.1.3 Reaching the Required Collective Bargaining Rate

The capacity of social partners to shape the labour market and their ability to respond to the major challenges of modern societies is strongly linked to the institutional configuration and architecture of their IR systems. As noted previously, this capacity appears to be significantly stronger in countries with well-established IR systems characterised by autonomous, powerful and all-encompassing employer and employee organisations, strong consultative mechanisms and centralised and coordinated multi-employer bargaining systems playing a key role for the regulation of employment relationships, working conditions, and pay (Anxo 2021; OECD 2019; Vaughan-Whitehead et al. 2021). In effect, high membership and density of workers' and employers' organisations is not only a guarantee for their representativeness, legitimacy, autonomy vis-à-vis public authority and their long-term sustainability (regarding *inter alia* their financial and power resources as well as their mobilisation capacity), it also conditions their ability to produce societal and labour market norms that regulate, in a balanced and fair manner, employment relationships, working conditions and wage formation. The higher the union density and the higher the rate of affiliation of employers to an employer organisation, the greater the scope and the coverage rate of collective agreements. The main features of the collective bargaining system, in particular the bargaining level at which collective agreements are predominantly negotiated, will also affect social partners' ability to regulate the labour market. Compared to decentralised IR systems, more centralised and coordinated collective bargaining systems at the industry/sectoral level involve a larger share of workers and companies/workplaces, and therefore lead to a higher coverage rate of collective bargaining. IR systems characterised by high trade union density and employers' affiliation rates and multiple-employer bargaining display a higher coverage rate of collective bargaining, as in the Nordic countries, in spite of the absence of legal extension mechanisms (see below). However as stressed by Müller et al. (2019), in multi-employer bargaining systems, the employers' affiliation rates seem to be more important than union density, and in a majority of EU countries, employers' affiliation rates far exceed union density (see Figure A4 in the Annex).

As shown previously, over the last three decades, bargaining coverage has, as a rule, proved to be much more stable than union density. In multi-employer

bargaining systems, the determining role of employers' affiliation rate⁸² regarding the coverage rate of collective bargaining is due to the fact that the terms and conditions of collective agreements usually apply to all workers, even those who are not members of a trade union. However, a large discrepancy between union and employer density affects the bargaining power of trade unions and thus the outcome of collective bargaining.⁸³ A continuous decline of trade union density also raises the problem of the legitimacy and representativeness of trade unions.

The existence of *de jure* or *de facto* extension mechanisms – extending the agreements beyond the signatory parties through *erga omnes* clauses or administrative extension – reinforces the role of collective agreements in regulating the labour market (see Table A1 in the Annex). The use of these extension mechanisms is more frequent in multi-employer bargaining regimes with low union density and/or low employers' affiliation rates. This allows countries like France and Spain to achieve a high coverage rate. If it is true that *erga omnes* clauses, as well as statutory minimum wages,⁸⁴ may reduce workers' incentives to join the union (the “free-rider” problem) as well as the incentives of unions to recruit new members, such clauses nevertheless ensure equal treatment of workers (fairness), reduce transaction costs and strengthen social partners governance of the labour market. *Administrative extension mechanisms* imply that collective agreements are extended to a whole sector/industry, i.e. an extension of collective agreements beyond the signatory parties, in particular to firms not affiliated to the signatory employer organizations (see Table A2 in the Annex).⁸⁵ These extension mechanisms reinforce the role of collective bargaining in shaping the world of work. However, as is the case with trade union member density, such systems may create disincentives for employers to join an employers' association and may also discourage employer organisations to increase their membership.⁸⁶ Member States with a bargaining coverage of 50% or less all have decentralised collective bargaining systems and limited forms of state support for extension mechanisms (see Tables A1 and A2 in the Annex). In these Member States, achieving the 80% rate specified in the MWD will require large modifications of their IR systems, and in particular a transition towards industry/sectoral level collective bargaining and more state support, for example

⁸² Affiliation rate or employer organisation density, i.e the number of companies member of an employer organisation, or number of employees working in companies part of an employer organisation (see OECD 2019).

⁸³ In addition to union density, other factors might affect the bargaining power of trade unions and the outcomes of collective bargaining such as trade unions' mobilisation capacity, the economic situation (periods of economic crisis versus expansion) and/or the situation in the labour market (high unemployment versus shortages of labour).

⁸⁴ And conversely, as mentioned previously, a declining union density and collective bargaining rates like in the UK and Germany may have triggered the introduction of a statutory minimum wage.

⁸⁵ As shown by Table A2 in the Annex, in some EU Members States, administrative extension mechanisms are linked to some formal representativeness criteria such as minimum thresholds in workplace election and/or level of union density.

⁸⁶ On the other hand, it could be argued that extension mechanisms might give employers an incentive to join the employer organisations in order to be able to have a say in the bargaining process.

by establishing extension mechanisms and policies supporting the development of employer and trade-union organisations.⁸⁷

As shown by the previous section, the capacity of social partners to shape the labour market, and to respond to the main challenges facing modern economies, is strongly dependent on the strength and autonomy of social partners and their capacity to conclude multi-employer collective agreements covering a large share of workers, workplaces and working situations. The high coverage rate of collective bargaining is strongly dependent of union and employer density. Even though administrative/statutory extension mechanisms may compensate for low union density and/or low employer affiliation rate and increase the scope of collective bargaining to shape the world of work, a high collective bargaining coverage based on powerful employer organisations and trade unions with a large membership base not only guarantees the independence/autonomy of social partners but also their actual capacity to regulate the terms and conditions of employment and the world of work in a fair manner. In this context the Nordic countries remains the ideal type of an IR system based on powerful and autonomous social partners playing a decisive role in the regulation of working and employment conditions.

The institutional capacity of social partners to shape labour market regulation is not restricted to bipartite negotiations between the two sides of industry and the conclusion of collective agreements at various levels. In many EU Member States, tripartite social dialogue and tripartite bodies play an important role for the design of labour market and social policies, and in some EU Member States for the setting of statutory minimum wages. As shown by Table A3, in some Central and Eastern European countries – namely Bulgaria, Croatia (until 2008), Estonia, Hungary (until 2011), Poland, Romania (until 2011) and Slovakia – minimum wages are (or were) negotiated in a tripartite body at national level (Müller et al. 2019).

Even though social partners' participation in policy making, particularly labour market and social policies, is relatively frequent in Europe, the degree and quality of involvement varies notably across EU Member States, depending on the type of IR systems, the effectiveness of the practices applied as well as the assessment of the social partners regarding the depth and intensity with which the engagement takes place. There are strong reasons for thinking that the impact of social partners on the design of employment and labour market policies, as well as their involvement regarding the adjustment of statutory minimum wages via tripartite concertation, is not independent of their organisational strength, i.e. their representativeness and their mobilisation capacity. Labour

⁸⁷ On the employer side, supporting the establishment of employers' organisation at the industry/sectoral level and promoting multi-employer bargaining. On the trade-union side, taking measures to strengthen trade unions' organisational capacities, for example by granting a right to access to companies or by countering union-busting activities.

market governance based on strong and autonomous social partners may not only effectively impede unilateral state regulations/interventions into the labour market, but also exercise a strong influence on the outcome of tripartite social dialogue regarding *inter alia* the adequacy of the level of minimum wages, the formation of labour law and the design of economic and social policy.

4.2 Statutory Minimum Wages, Industrial Relations Systems and Wage Inequality

There is a large and well-established empirical literature examining the relationship between IR systems, wage structure and wage inequality in advanced economies. The overwhelming share of these studies have been conducted in the US or in the UK. A central issue in the literature has been whether the modifications in the wage structure and trends in earnings inequality can be explained principally by technological changes and their impact on the skills structure (Acemoglu & Autor 2011) or whether labour market institutions such as the collective bargaining system and minimum wages also play a significant role in explaining the changes. A consistent finding in the empirical literature is that countries with high union density, high collective bargaining coverage rates and centralised bargaining systems exhibit lower wage dispersion and a more compressed wage structure, in other words have higher levels of equality (Hayter & Weinberg 2011; Machin 2008; Salverda & Checchi 2014; Card et al. 2020).

Early empirical work analysing the impact of unionisation on the dispersion of wages in the private sector during the 1970s in the US found that wage dispersion⁸⁸ both between and within firms was significantly lower in the unionised sector compared to the non-unionised sector (Freeman 1980, 1982). Freeman found also lower wage differentials between low-paid blue-collar workers and white-collar workers in the unionised sector. Gosling and Machin (1995) found similar results for the UK, earnings dispersion being lower within the union sector compared to sector/firms where wage setting was not the outcome of wage bargaining between the two sides of industry. The compression effect in the wage structure was explained by the union's wage policy, which aimed at increasing low-paid members' wages, and by the aim of standardising pay for a given job/occupation. During the mid-1990s several empirical studies also provided evidence that the increase in wage inequality in the US and UK coincided with the decline of union density and collective bargaining rates and a decentralisation of wage bargaining (Freeman 1993; Card 1996; DiNardo et al. 1996; Machin 1997). Fortin and Lemieux (1996) showed that one third of the increase in wage inequality among workers between 1973 and 1992 in the US was due to weakening of labour market institutions, i.e. a decline in union density. Gosling and Machin (1995) reached a similar conclusion for the UK estimating that the fall in unionisation during the 1980s accounted for some 15% of the increase in wage inequality among semi-skilled male workers. This

⁸⁸ Wage dispersion was measured by the standard deviation of log wages.

same study shows that the decline in the real value of the lowest wages during the 1980s accounted for a significant part of the growth in wage inequality at the bottom end of the wage distribution during this period, particularly for women. Besides the decline in union membership, the decentralisation of collective bargaining has been found to be associated with a rise in wage inequality. To illustrate, the relatively compressed wage structure and the limited wage inequality in Sweden has been explained by the specific features of its IR system characterised by high union density, high coverage rate of collective bargaining as well as by centralised and coordinated multi-employers wage bargaining (Anxo & Niklasson 2006; Anxo 2018, 2019, 2021a). Between 1960 and the early 1980s Sweden experienced a significant decrease of wage dispersion, due to its centralised wage bargaining system and a wage policy aimed at increasing negotiated wage floors. And the breakdown of centralised wage bargaining and the decentralisation of wage bargaining at industry level in 1983 was followed by an increase of wage inequality (Anxo & Niklasson 2006; Hibbs & Locking 1996). Recent empirical studies using more sophisticated econometric methods also confirm the crucial role of labour market institutions (IR systems and minimum wage) on the development of wage inequality during the last three decades in the US (Card et al. 2018; Firpo et al. 2018; Fortin et al. 2021).

As mentioned, the majority of empirical studies have been conducted in the US or in the UK, and fewer empirical studies have analysed the role of the IR system on wage inequality in other countries. Visser and Checchi (2009), analysing the impact of labour market institutions across a sample of advanced economies, found that those with low collective bargaining coverage and low union density tend to experience higher levels of wage and earnings inequality (see also Salverda & Checchi 2014). Visser and Checchi (2009) also found that countries with high collective agreement coverage experience *ceteris paribus* greater wage compression, but that wage inequality remained higher in countries with lower union density, highlighting the central role of bargaining power of trade unions in reducing wage and earnings inequality. The negative impact of low union density and low coverage of collective bargaining on wage inequality might be partially offset by other institutional arrangements such as the statutory minimum wage. As noted previously, the decline in union density and coverage rate of collective bargaining in many EU Member States during the last decades has triggered the introduction of statutory minimum wages, like in the UK in the 1990s or more recently in Germany (2015). While the impact of bargaining coverage potentially extends to the entire earnings distribution, the impact of statutory minimum wage is predominantly restricted to the bottom tail of the wage distribution with limited spill-over effect (Dickens & Manning 2008). This explains why wage inequality in the lower tail of the wage distribution and the share of low-paid workers⁸⁹ is lower in the Nordic countries or in Member

⁸⁹ Low-wage earners are defined as employees who earn two-thirds or less of median gross hourly earnings.

States with statutory minimum wages but high coverage and relatively high union density, such as Belgium, compared to in Member States with a statutory minimum wage but weak IR systems, such as Central and Eastern European countries (see also below).

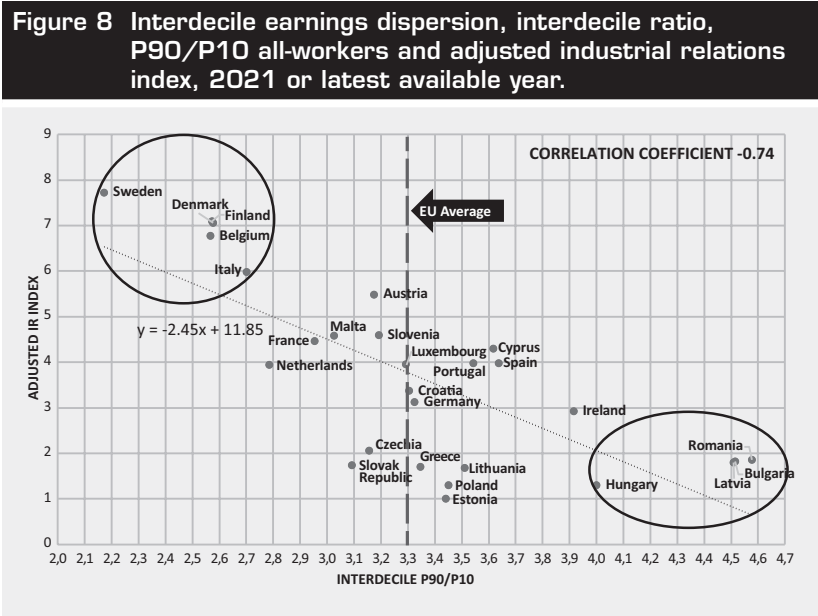
Using recent aggregate data at the Member State level, we analyse in the following section the relationship between IR systems as defined above and wage distribution and equality. We create a simple index of industrial relations system calculated as the weighted average of union density and coverage rate of collective bargaining at the national level (see note under Figures 8 and 9 for details). The higher union density and coverage rate of collective bargaining, the higher our index. The highest IR system index (IRI) is found in the Belgian and the Nordic IR systems (ranging from 7.7 in Sweden to 6.8 points in Belgium) but also in Italy (around 6 points). The lowest is found in Estonia (1 point), see Figure A7 in the Annex.

As mentioned, the IR systems in Belgium and in the Nordic countries are characterized by multi-employer bargaining, with industry as the main level at which collective agreements are concluded and a high degree of co-ordination. They all have a coverage rate significantly above the 80% MWD's target and the highest union density among Member States, ranging from 70% in Sweden to 49% in Belgium. While the Nordic countries have collectively agreed wage floors, Belgium has a universal statutory minimum wage, but one which the social partners are strongly involved in setting and updating. As shown by Figure 8, there is a strong, negative correlation (-0.74) between wage dispersion measured by the interdecile dispersion ratio P90/P10 and our IRS index. The Nordic Member States, Belgium and Italy display a much more compressed wage structure with the lowest wage inequality among EU Member States (the interdecile ratio P90/P10 ranging from 2.2 in Sweden to 2.6 in the three remaining countries). At the other extreme, wage inequality appears to be much higher among Baltic and Central and Eastern European countries with their much more fragmented IR systems, characterised by single employer bargaining, with collective agreements predominantly concluded at the company level, low extent of coordination, low union density (ranging from 4% in Estonia to 15% in Bulgaria in 2021) and low coverage rate of collective bargaining (ranging in 2021 from 13% in Poland to 35% in Czechia). The highest interdecile ratio is found in Romania, Bulgaria, Hungary and Latvia with a P90/P10 ratio above 4.0.

On the whole, the wage structure is more compressed at the bottom end of the wage distribution, and with on average higher wage dispersion among men. As shown by Figure 9, we find the same patterns, with a negative relationship between our composite IR index and wage dispersion at the lower tail of the wage distribution. The negative correlation between our IR index and the interdecile ratio (P50/P10) is even stronger (-0.79). As with the P90/P10 wage

dispersion, Belgium, the Nordic Member States and Italy display a higher wage compression in the lower part of the wage distribution, with Sweden having the lowest P50/P10 ratio (1.36) among EU Member States. Wage inequality is as before highest in the Baltic and the Central and Eastern European countries, but it is also high in Germany and Ireland, with P50/P90 ratios slightly above the EU average. It is interesting to note that among the group of EU countries with low wage dispersion in the lower part of the wage distribution, Belgium is the only country with a statutory minimum wage. The low wage dispersion in the low-pay segment of the wage distribution in Belgium is therefore the result of the combination of high union density and high coverage rate as well as their strong involvement in the setting and updating of the statutory minimum wage.

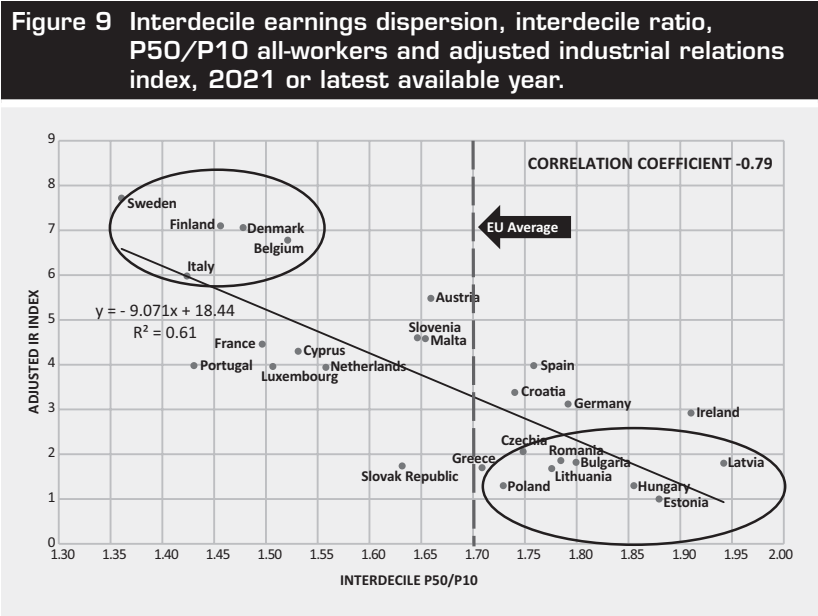
As shown by Figure A7 in the Annex, the correlation between the IRS and the interdecile wage dispersion (P50/P10) among female employees is lower (-0.61), but Belgium, the Nordic countries and Italy display a lower female wage



Note: *Adjusted Industrial Relation Index (IRI)*: Weighted average of Union Density (UD) and Coverage Rate (COV).
 $IRSI = 1/10 (0.6 \cdot UD + 0.4 \cdot COV)$. The index ranges between 0 and 10. The minimum IRS index is found in Estonia (1) and the maximum in Sweden (7.7).
Decile ratio: The indicators of decile ratios of labour earnings are based on full-time dependent employees' gross earnings, that is, labour earnings before the deduction of income tax and social security contributions payable by the employee. Three earnings-dispersion measures are here considered: ratio of 9th-to-1st (P90/P10), 9th-to-5th (P90/P50) and 5th-to-1st (P50/P10), where ninth, fifth (or median) and first deciles are upper-earnings decile limits (OECD 2023a).
Source: For interdecile earnings dispersion: OECD (2023a). For Industrial Relations System: OECD/AIAS (2023), Visser (2019) and own calculations.

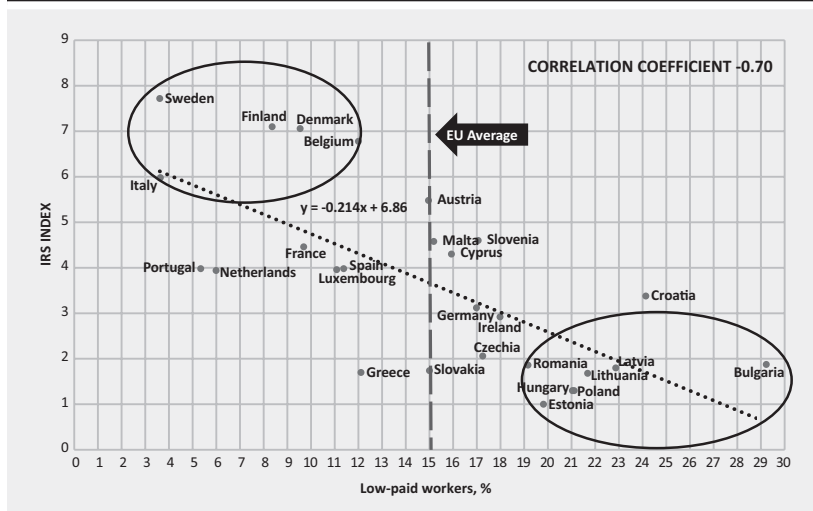
dispersion compared to other Member States. In this part of the distribution, wage inequality among women is higher in the Baltic and Central and Eastern European countries.

As shown by Figures 8 and 9, there is also a strong, negative correlation (-0.70) between the share of low-paid workers (earning less than two-thirds of median earnings) and our IR systems' typology. We find the same polarisation between the Nordic Member States, with low incidence of low-paid workers (less than 10% and ranging from 3.6% in Sweden to 9.5% in Denmark), and the Baltic and Central and Eastern European countries (ranging from 14% in Slovakia to 29.3% in Bulgaria, see Figure A8 in the Annex). It should also be noted that Italy is characterised by wage floors determined by collective agreements, the highest collective bargaining coverage among EU countries (100%) and a medium level of union density (33%), and therefore a relatively high IR Index (around 6 points). Along with Sweden, Italy exhibited the lowest incidence of low-



Note: *Adjusted Industrial Relation Index (IRI)*: Weighted average of Union Density (UD) and Coverage Rate (COV).
 $IRSI = 1/10 (0.6 \cdot UD + 0.4 \cdot COV)$. The index ranges between 0 and 10. The minimum IRS index is found in Estonia (1) and the maximum in Sweden (7.7).
Decile ratio: The indicators of decile ratios of labour earnings are based on full-time dependent employees' gross earnings, that is, labour earnings before the deduction of income tax and social security contributions payable by the employee. Three earnings-dispersion measures are here considered: ratio of 9th-to-1st (P90/P10), 9th-to-5th (P90/P50) and 5th-to-1st (P50/P10), where ninth, fifth (or median) and first deciles are upper-earnings decile limits (OECD 2023a).
 Source: For interdecile earnings dispersion: OECD (2023a). For Industrial Relation System: OECD/AIAS (2023), Visser (2019) and own calculations.

Figure 10 Incidence of low-paid workers and adjusted industrial relations index, 2021 or latest available year.



Notes: The incidence of low-paid workers refers to the share of dependent employees earning less than two-thirds of median earnings. Data refer to full-time employees and gross labour earnings, that is, before the deduction of income tax and social security contributions payable by the employee. Adjusted Industrial Relation Index (IRI): Weighted average of Union Density (UD) and Coverage Rate (COV).

$IRSI = 1/10 (0.6 \cdot UD + 0.4 \cdot COV)$. The index ranges between 0 and 10. The minimum IRS index is found in Estonia (1) and the maximum in Sweden (7.7).

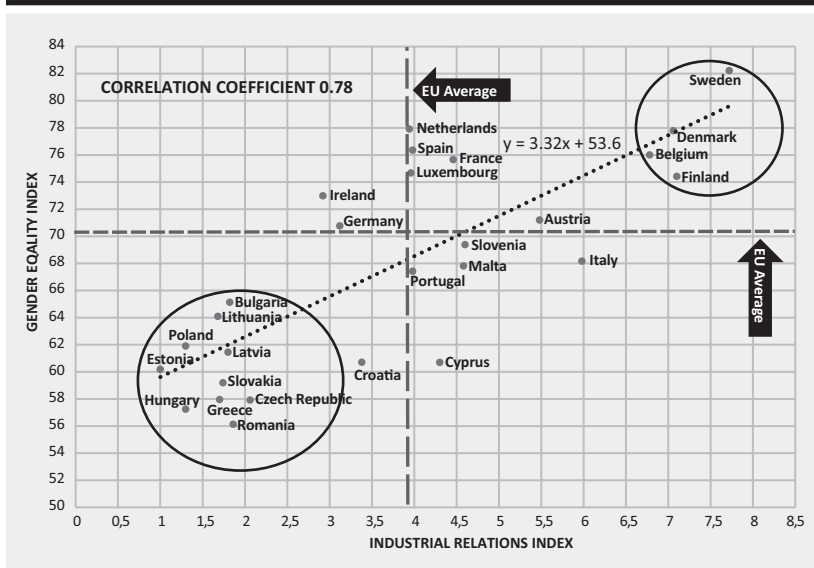
Source: OECD (2013a) and own calculations.

paid workers in 2021. Three Member States with statutory minimum wages, France, Portugal and the Netherlands, also exhibit a low incidence of low-paid workers (less than 10%). These three Member States have low union density but a relatively high coverage rate of collective bargaining: in the Netherlands and Portugal near to the 80% MWD target and in France 96%, which is significantly higher. It is also interesting to note that France and Portugal fulfilled the MWD criteria for minimum wage adequacy in 2021⁹⁰ (see Figure 1 upper panel).

On average, the incidence of low-paid workers is higher among women (respectively 18.3% and 12.3% for EU as a whole). Except for Bulgaria and Romania, the incidence is higher for women in all other Member States (see Figure A9 in the Annex). We find a similar negative relationship between IR systems and the prevalence of low pay, but the correlation is lower for women (-0.5 contra -0.7 for all). IR systems characterised by both high union density and collective bargaining coverage is associated with a lower share of female low-paid workers, and we find similar patterns between on the one hand the Nordic

⁹⁰ The statutory minimum wage should at least be 60% of the median gross wage.

Figure 11 Gender equality index and adjusted industrial relations index, 2021 or latest available year.



Note: *Gender Equality Index* is a synthetic index, hierarchically structured. It is composed of six core domains (work, money, knowledge, time, power and health) and each core domain is sub-divided into two or three sub-domains. In total, there are 14 sub-domains and each sub-domain is divided into one to three indicators. There are 31 indicators across the sub-domains in the last version of the index (see EIGE 2023). *Adjusted Industrial Relation Index (IRI)*: Weighted average of Union Density (UD) and Coverage Rate (COV). $IRSI = 1/10 (0.6 \cdot UD + 0.4 \cdot COV)$. The index ranges between 0 and 10. The minimum IRS index is found in Estonia (1 point) and the maximum in Sweden (7.7 points).

Source: For Gender Equality Index: EIGE (2023). For Industrial Relation Systems: OECD/AIAS (2023), Visser (2019) and own calculations.

countries, Belgium and Italy, and on the other hand the Central and Eastern European countries (see Figure A10 in the Annex). Provided that an increase of MW does not negatively affect employment, an increase of the minimum wage up to 60% of the median wage as stipulated in the MW Directive will reduce the incidence of low-paid workers. Since women are disproportionately represented in low-paid work compared to men, in the absence of any detrimental effect on their employment, they should benefit the most from an increase of the minimum wage, particularly in countries where the incidence of female low-paid workers is high (see for example Bargain et al. 2018).

Few empirical studies have analysed the relationship between the gender wage gap and industrial relations systems. Using microdata for 22 OECD countries over the 1985–94 period, Blau and Kahn (2003) found that the higher wage floors in countries with high union density, high coverage rates of collective bargaining and highly centralised wage setting raise women's relative pay and

lower the gender wage gap, since women are to a larger extent located at the bottom of the wage distribution. Consistent with these results, i.e. that the extent of collective-bargaining coverage is significantly negatively related to the gender pay gap, the objective to increase the collective bargaining rate to 80% in the EU and actively involve the social partners in the setting of MW, as stated in the MW Directive, may be an efficient policy instrument to reduce the gender wage gap. However, as noted by Rubery and Grimshaw (2015), a rising SMW in a context of weak trade unions and limited joint regulation of wages (e.g. through collective bargaining), as in the UK during the 2000s, does not provide a good platform for reducing the gender wage gap. In other words, minimum wages tend to have stronger wage equality effects when combined with collective bargaining (Grimshaw et al. 2013, 2014; Rubery & Johnson 2019). In this regard, the interlinked, dual objective of the EU MW Directive, namely to both strengthen collective bargaining and involve trade unions in the setting and uprating SMW, seems to go in the right direction.

Using the EIGE Gender Equality Index (EIGE 2023), Figure 11 displays the relationship between gender equality and our categories of IR systems as measured by the IR index. The Gender Equality Index (GEI) is a synthetic index reflecting the gender gap in six core domains (work, earnings/income, education, time allocation, power and health). Once again, we find a strong but this time positive correlation (+0.78) between the type of IR system measured by our IR index and overall gender equality.

The Nordic countries and Belgium, which are characterised by powerful and independent social partners playing a crucial role in the production of labour market norms, wage formation, social protection and welfare state arrangements,⁹¹ display the highest GEI score.⁹² It should be recalled that the Nordic countries have conducted pro-active gender equal opportunity policies (gender mainstreaming) since the early 1970s and were among the first countries to introduce flexible and generous work-life balance arrangements, such as

⁹¹ Such as parental leave system, unemployment insurance, health and pension systems.

⁹² The high GEI score in Belgium and the Nordic countries cannot be solely ascribed to their IR system as measured by our simple IR index. The high GEI in these Member States also reflects the specificity of their welfare state regimes and institutional arrangements (Anxo et al. 2010a). However, the strong involvement of social partners in the shaping of employment and working conditions, wage formation and their active role regarding vocational training and life-long learning, alongside high female union density, explain the lower gender gap in the three components of the GE index, namely work, earnings/income and education. Regarding the health component of the GE index, high job quality, decent working conditions across the life course, health and safety mainly regulated by social partners explain why the Nordic countries display the highest life expectancy in good health for both men and women. The involvement of social partners in the design of the social protection system and work-life balance arrangements, and the possibility to modify them via collective agreements, are also important factors that contribute to explain the high GEI in the Nordic countries.

parental leave,⁹³ the development of public childcare and elderly care facilities and services (see also Anxo et al. 2007, 2010, 2010a, and Grimshaw et al. 2021 for an analysis of the impact of these arrangements on female labour supply and the gender employment gap). The early feminisation of the labour force and the sustained strong labour market attachment of women across the life course, facilitated *inter alia* by these work-life balance arrangements, have also entailed a more equal gender allocation of time between household, labour market and social activities (Anxo et al. 2011). Not only is women's representation in Parliament and political bodies among the highest in the world, their high level of trade union membership helps put gender equality issues and the reduction of the gender wage gap at the top of the political agenda. The strong feminisation of the labour force coupled with the large modifications in the employment structure from manufacturing to the service sector (public and private services) means that today a majority of union members in the Nordic countries⁹⁴ are women and that union density is significantly higher for women than for men.

Countries with fragmented IR systems and less involvement of social partners in the production of labour market and social norms, and therefore with a significant lower IRS index, such as the Baltic and Central and Eastern European countries (but also Greece), display a significantly larger gender gap in most of the six core domains included in the GE index and therefore the lowest GEI score among EU Member States.

4.3 The Crucial Role of Industrial Relations Systems

As shown in the previous sections, certain Industrial Relations Systems (IRS) appear not only to favour better working conditions for men and women, lower wages and earnings inequality as well as gender-equal opportunities, but also to deliver better labour market outcomes, particularly a lower gender gap in pay and employment, as well as sustainable and inclusive economic growth and social cohesion. These systems are characterised by a high union density and coverage rate of collective bargaining, balanced bargaining power between the two sides of industry, centralised and coordinated two-tier multi-employer collective bargaining systems. Labour market governance by the social partners and a developed (tripartite and/or bipartite) social dialogue, as in the Nordic countries and Belgium (the so called Ghent system of IR), not only seems to better reconcile economic efficiency, social justice and gender-equal opportunity, but also to be better adapted to meet, and to provide an

⁹³ The parental leave system was introduced in 1974 in Sweden, 1978 in Finland and 1984 in Denmark.

⁹⁴ Sweden's union density was 73% for women and 65% for men in 2022 (Kjellberg 2023). In 2019, around 55% of union membership were women in Finland, and union density was also significant higher for women: 66% compared to 52% for men. At the same date, union density in Denmark was around 73% for women and 64.8% for men. See <https://www.worker-participation.eu/national-industrial-relations/countries/denmark#:~:text=Overall%20there%20are%20slightly%20more,women%2C%20which%20is%2048.2%25>.

effective and fair response to, challenges linked to globalisation, demographic, technological changes and the green transition. We have also shown that minimum wages tend to have stronger wage equality effects when combined with strong union and high collective bargaining coverage. In light of this, strengthening the representativeness and autonomy of social partners and their institutional capacity to shape the labour market and social norms should indeed be prioritized. Such a policy strategy is in line with the aim of the Minimum Wage Directive to promote social dialogue and multi-employer collective bargaining at national level in order to ensure the setting of adequate minimum wage levels that enable a decent standard of living, to reduce wage inequality, to help close the gender wage gap, to reduce the incidence of low-paid workers, and to contribute to upward social convergence within the European Union. In other words, if an increase in collective bargaining coverage appears to be a necessary condition for achieving part of these objectives, it is not a sufficient condition. Increasing collective bargaining coverage should be combined with measures favouring a balance in bargaining power between the two sides of industry, a transition towards more centralised and coordinated multi-employer collective bargaining systems as well as the development of a tripartite social dialogue ensuring the active involvement of social partners in the setting and uprating of SMW.

As far as gender equity is concerned, we have shown that early empirical evidence found that the higher wage floors in countries with high union density, high coverage rate of collective bargaining, and highly centralised wage setting raise women's relative pay and lower the gender wage gap, since women are to a larger extent located at the bottom end of the wage distribution. Consistent with these results (i.e. that the extent of collective-bargaining coverage is significantly negatively related to the gender pay gap) the objective of increasing the collective bargaining rate to 80% in the EU and actively involving the social partners in the setting of MW, as stated in the MW Directive, may be an efficient policy instrument to reduce the gender wage gap. Furthermore, we have shown that the Nordic countries and Belgium – characterized by powerful and independent social partners playing a crucial role in the production of labour market norms, wage formation, social protection and welfare state arrangements – display the highest Gender Equality Index in the EU. Not only is women's representation in Parliament and political bodies among the highest in the world, also their high level of trade union membership and collective bargaining coverage helps put gender equality issues at the top of the political agenda. The strong feminisation of the labour force coupled with the large modifications in the employment structure from manufacturing to the service sector means that today union density in the Nordic countries is significantly higher for women than for men. Countries with fragmented IR systems, low union density and coverage rate of collective bargaining, and less involvement of social partners in the production of labour market and social norms, exhibit the lowest Gender Equality Index among EU Member States.

As shown previously, even though collective bargaining and social dialogue in Europe still plays a crucial role in shaping the terms and conditions of employment of workers, as testified by the around 115 million employees who are covered by collective bargaining, developments during the last three decades have led to an overall decline in union density and in the coverage rates of collective bargaining, in combination with a marked tendency towards decentralisation and fragmentation of collective bargaining. In other words, during the last decades there has been a clear tendency towards a weakening of the capacity of social partners to regulate the labour market in a fair manner and an increase in state intervention aiming at deregulating the labour market and giving more scope to market solutions and unilateral employers' decisions regarding the terms and conditions of employment. Tripartite social dialogue/concertation remains an important component of IR systems in a majority of EU Member States, but the developments during the last decade, particularly in some Central and Eastern European countries (Hungary, Lithuania, Poland, Romania), show a tendency to a further weakening of the regulatory role of tripartite social dialogue institutions.

Social partners in Europe have responded to these negative tendencies by developing some strategies to counteract the decline in union and employer membership and the decrease in the coverage rates of collective bargaining (see Anxo 2021). From the unions' side, these initiatives have tried to broaden the membership base to strengthen their power resources and to secure their autonomy by attracting and recruiting new members beyond the traditional areas of representation, for instance newly arrived migrants, workers with short-term contracts, solo and/or bogus self-employed, and digital platform workers, where women often are overrepresented. The second most common strategy of unions has been to extend and improve services provided to members (such as legal advice, training, group insurance schemes, support and services for members through digital services and online communities and even in some cases supplementary income compensation schemes benefiting union members, e.g. in case of unemployment or sickness). In countries with low employer density, some attempts have been made by employer organisations to broaden, diversify, and attract new membership by also providing better services to affiliated companies.

However, thus far, these initiatives have not been able to counterbalance the impact of neo-liberal policy reforms. During the last two decades, these neo-liberal reforms have accelerated the decline of union density, the decentralisation of collective bargaining and the reduction of collective bargaining coverage rates in many Member States. Furthermore, in several EU Member States we have seen a weakening of tripartite social dialogue and an increase in unilateral state intervention in the labour market, reducing the autonomy of social partners and their capacity to regulate the terms and conditions of employment. The developments in Germany, with a decline of both union density and coverage

rates, indicate a transition from the Nordic IR system of social partnership to a hybrid, mixed system of social partners/state governance of the labour market, as illustrated by the recent introduction of a statutory minimum wage (2015). Overall, during the last decade there have been few policy initiatives by public authorities at the EU or national level to strengthen the representativeness of social partners and increase their institutional capacity to shape the labour market through social dialogue. Some exceptions are worth noting, however. In Romania, a new law on social dialogue was adopted in December 2022 to promote collective bargaining, with *inter alia* less restrictive extension criteria meaning that signatory employer's associations today need to represent 35% of employees (compared to 50% previously). As mentioned previously, Article 9 of the MWD mentions that public procurement can be used as a policy instrument to promote collective bargaining. In this context, Germany plans to introduce new federal legislation on public procurement in 2024 ensuring that public contracts at national level will be awarded only to companies that comply with collectively agreed employment conditions.

If the policy objective of the EU, as illustrated by the adoption of the MW Directive, is now to change direction and to move towards IR systems characterised by high collective bargaining coverage rates and powerful and autonomous social partners playing a crucial role in the production of fair labour market norms, as in the Nordic countries, there is a long way to go, especially in those Member States that have highly decentralised and non-coordinated bargaining systems such as the prevailing single-employer bargaining regimes prevalent in the majority of Central and Eastern European countries. These countries are characterised by both low union density and low coverage rates of collective bargaining that are far from the MWD target of 80%. The political and institutional conditions for a transition and a convergence towards a regime of industrial relations favouring a system of labour market governance based on autonomous and strong social partners and a constructive social dialogue remains therefore uncertain. Such a transition will crucially depend on monitoring and financial support at the EU level, like the use of European Social Funds (ESF+), but primarily on political willingness at the national level.

5 Conclusion

The Directive on adequate minimum wages in the European Union (MWD) is one of the major recent EU initiatives aimed at revitalising Europe's social dimension. The MWD constitutes a paradigm shift by the European Commission regarding the acknowledgment of the positive role that bipartite/tripartite social dialogue, labour market institutions such as collective bargaining systems, and employment and minimum wage regulation play in favouring inclusive economic growth and bolstering social cohesion by limiting social exclusion and earnings inequalities.

Impact on wage and earnings inequality

As we have noted, the Directive does not aim to set a uniform minimum wage level across Europe, but rather to specify certain criteria to ensure adequate minimum wages are set at national level. The other objective of the Directive is to strengthen collective bargaining, which is interlinked with the first.

To guide their assessment of the adequacy of statutory minimum wages, the MWD stipulates that Member States shall use indicative reference values of 60% of the gross median wage and/or 50% of the gross average wage. We have shown that independently of the reference value used, a majority of Member States with SMWs did not fulfil the decency threshold criteria in 2022. These Member States will therefore have to establish the necessary procedures for an updating/upgrading of their SMW, principally by increasing the level of the minimum wage to attain the reference values. The increase of the hourly SMW needed to reach the decency threshold target could be substantial, particularly in the Baltic countries and Central and Eastern European countries, but also in Belgium and the Netherlands.

The EU Commission's impact pre-assessment and simulations suggest that these hypothetical minimum wage increases can significantly reduce wage inequality, in-work poverty, and the gender pay gap. Drawing on a review of the theoretical and scientific empirical literature on minimum wage, this report sought to assess the validity of the hypotheses and expected effects of the MWD as well as the extent to which the Directive constitutes an efficient instrument to improve working conditions of men and women, to reverse the trend in increasing inequalities, to help to close the gender wage-gap and to promote upward social and economic convergence in Europe.

Overall, the review of empirical studies of the impact of MW on the wage distribution suggests that an increase in the SMW significantly increases the wages of low-paid workers. This provides strong evidence that SMWs, by compressing the wage structure at the bottom end of the wage distribution, reduce wage inequality, particularly for women, who are overrepresented

among low-paid workers. The impact of SMWs on individual labour earnings and labour earnings' inequality are more complex and depends *inter alia* on the impact of SMWs on employment and working hours of low-paid workers. However, the equalizing impact of MW hikes on the distribution of labour earnings was, during the 1990s, the subject of controversy and it remains so today. Nevertheless, a review of up-to-date studies from US, UK and other developed countries points to a very modest effect on employment of moderate increases of MW, up to 60% of the average wage, while significantly increasing the earnings of low-paid workers. In other words, moderate increases of MW seem to have not only an equalizing effect on wages but even on the earnings distribution at the lower end of the wage distribution.

What are the impacts of an increase of MW on *household* income distribution? This, too, is the subject of some controversy, even if the more recent evidence from the US reveals positive distributional effects of a rise in MW. The impact of minimum wage on the distribution of household income depends on where the beneficiaries of SMW are located in the household income distribution as well as on the structure of the tax and benefit system of the country considered. Few empirical studies have analysed the impact of the variation of MW on in-work poverty and household income distribution in the EU. As a UK study by Atkinson et al. (2019) shows, an increase in SMW has only a very modest impact in reducing income inequality or poverty, reflecting the fact that low-paid employees are spread across the whole household income distribution rather than concentrated towards the bottom end of the distribution. Contrasting with the above-mentioned UK study, the simulations carried out by the EU Commission in its pre-assessment shows that a substantial increase in the MW significantly reduces wage inequality *and* in-work poverty. According to the simulations, the average reduction in wage inequality is estimated to range between 8 and 10% while the average decline in in-work poverty is estimated to range between 12 and 13%, consistent with the most recent US studies.

Impact on Gender Inequality

Few empirical studies have been conducted to assess the extent to which an increase of the SMW reduces the gender wage gap at the bottom half of the wage distribution. Our review of empirical studies shows that an increase of SMW can indeed contribute to reduce gender wage disparities, consistent with the objective of the EU MW Directive and with the results of the EU Commission's pre-assessment which finds that an uprating of MWs in the EU would decrease the gender wage gap by around 5%.

Our analysis of industrial relations systems (IRS) in the EU shows that IRS characterised by a high union density and coverage rate of collective bargaining, a balanced bargaining power between the two sides of industry, centralised and coordinated multi-employer collective bargaining systems appear not only to favour better working conditions, wage equality as well as gender equality, but also

to deliver better labour market outcomes, economic growth and social cohesion. Labour market governance by the social partners and a developed (tripartite and/or bipartite) social dialogue, as in the Nordic countries, not only seems to better reconcile economic efficiency and social justice, but it also seems better adapted to meet and provide an effective and fair response to the challenges linked to globalisation, demographic, technological changes and the green transition.

We also have shown that minimum wages tend to have stronger wage equality effects when combined with strong union and high collective bargaining coverage. In light of this, strengthening the representativeness and autonomy of social partners and their institutional capacity to shape labour market and social norms should indeed be prioritized. Such a policy strategy is in line with the aim of the Directive's aim of promoting social dialogue and multi-employer collective bargaining at national level. In other words, if the increase of collective bargaining coverage appears to be a necessary condition for achieving part of these objectives, it is not a sufficient condition. The increase of collective bargaining coverage should thus be combined with measures favouring a balanced bargaining power between the two sides of industry, a transition towards more centralised and coordinated multi-employer collective bargaining systems as well as the development of a tripartite social dialogue ensuring the active involvement of social partners in the setting and uprating of SMW.

As far as gender equity is concerned, we have shown that early empirical evidence found that the higher wage floors in countries with high union density, high coverage rate of collective bargaining and highly centralised wage setting raise women's relative pay and lower the gender wage gap, since women are to a larger extent located at the bottom of the wage distribution. Consistent with these results (i.e. that the extent of collective bargaining coverage is significantly negatively related to the gender pay gap) the MWD's objectives of increasing the collective bargaining rate to 80% in the EU and actively involving the social partners in the setting of MW may be an efficient policy instrument to reduce the gender wage gap. Furthermore, we have shown that the Nordic countries and Belgium – characterized by powerful and independent social partners playing a crucial role in the production of labour market norms, wage formation, social protection and welfare state arrangements – score highest among EU countries on the Gender Equality Index. Countries with fragmented IR systems, low union density and coverage rates of collective bargaining, and less involvement of social partners in the production of labour market and social norms, score lowest among EU countries on the Gender Equality Index.

This, too, suggests that strengthening the representativeness and autonomy of social partners and their institutional capacity to shape labour market and social norms should be prioritized. And again, such a policy strategy is in line with the aim of the MWD to promote social dialogue and collective bargaining at national level.

Context and complementary policies

Even though collective bargaining and social dialogue in Europe still play a crucial role in shaping the terms and conditions of employment of workers – as testified by the around 115 million employees who are covered by collective bargaining – developments during the last three decades have led to an overall decline in union density and in the coverage rates of collective bargaining, as well as to a marked tendency towards decentralisation and fragmentation of collective bargaining. In other words, during the last decades there has been a clear tendency towards a weakening of the capacity of social partners to regulate the labour market in a fair manner and an increase in state intervention to deregulate the labour market and to give more scope to market solutions and unilateral employers' decisions regarding the terms and conditions of employment. Tripartite social dialogue/concertation remains an important component of IR systems in a majority of EU Member States, but the developments during the last decade, particularly in some Central and Eastern European countries, show a tendency to a further weakening of the regulatory role of tripartite social dialogue institutions.

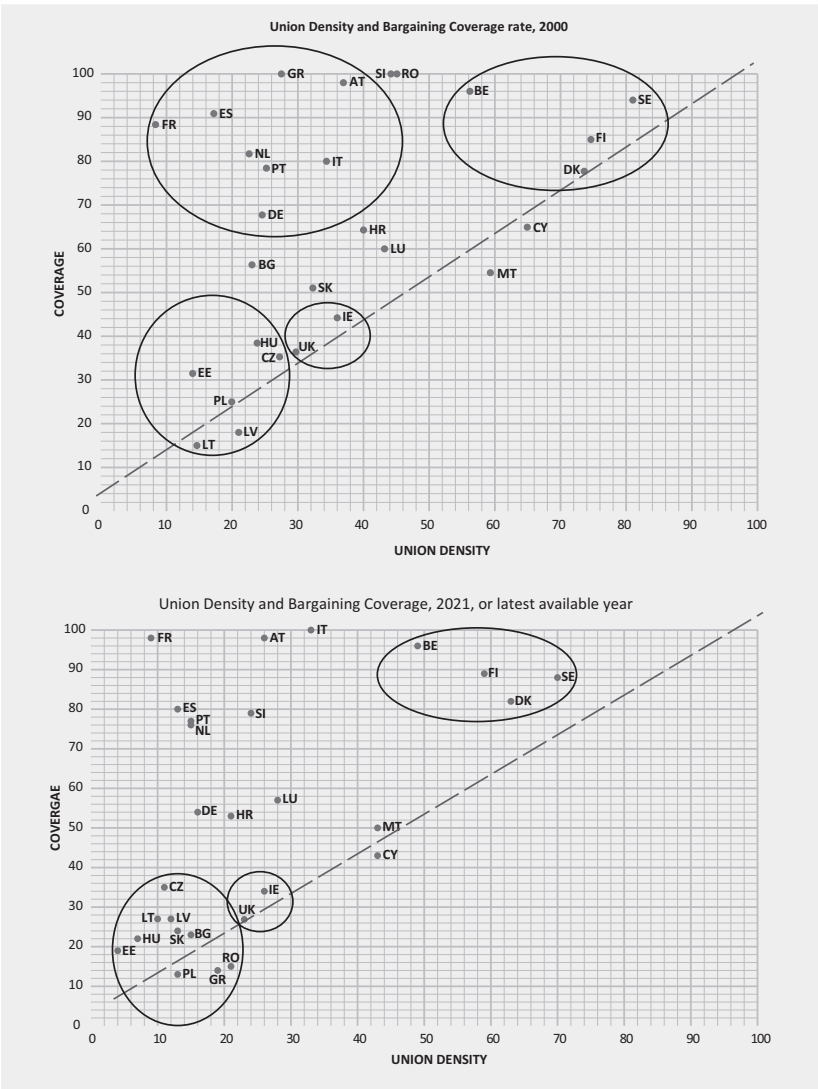
If the policy objective of the EU, as illustrated by the adoption of the MW Directive, is now to change direction and to move towards IR systems characterised by high collective bargaining coverage rates and powerful and autonomous social partners playing a crucial role in the production of fair labour market norms, there is a long way to go, especially in those Member States that have highly decentralised and non-coordinated bargaining systems such as the majority of Baltic and Central and Eastern European countries, where single-employer bargaining regimes predominate. These countries are characterised by both low union density and low coverage rates of collective bargaining that are far from the MWD target of 80%. The political and institutional conditions for a transition and convergence towards a regime of industrial relations favouring a system of labour market governance based on autonomous and strong social partners and constructive social dialogue remains, therefore, uncertain. It will crucially depend on the monitoring and financial support at the EU level, as well as the political willingness at the national level to support such a transition.

The Minimum Wage Directive, in particular the uprating of statutory minimum wages, can, as we have seen, contribute to improving the employment conditions of men and women in the labour market and reduce gender wage and earnings inequalities at the lower end of the wage distribution. It should, however, be stressed that gender differences, for example in labour supply, should continue to be addressed with other policy instruments. These might include the preservation and development of public services, such as public childcare and elderly care facilities, the extension of work-life balance arrangements such as generous and flexible parental leave systems, the development of life-long learning facilities as well as the development of gender-neutral fiscal and social protection systems.

Annex

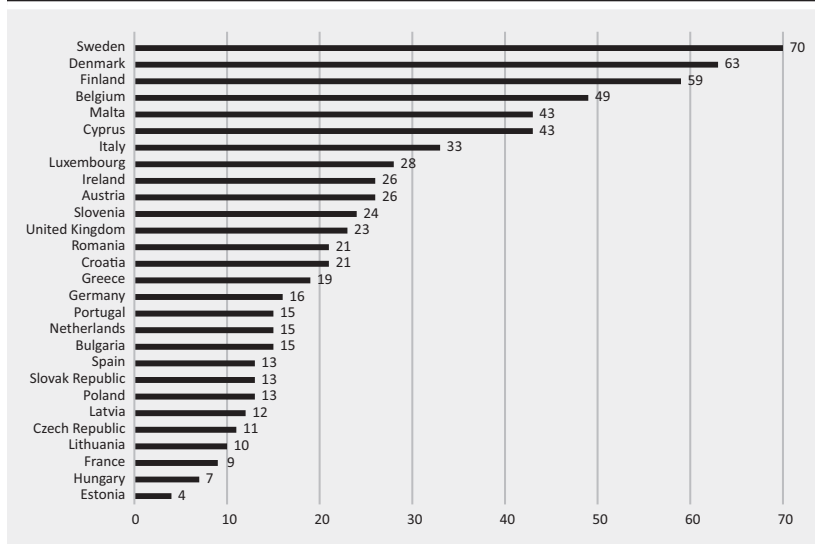
Figures

Figure A1 Union density and coverage rate of collective bargaining, 2000 and 2021 or latest available year.



Note: *Union density*: Proportion of employees who are member of a trade union among all employees. *Collective Bargaining Coverage rate*: Proportion of employees covered by collective (wage) agreements in force among employees with the right to bargain.
Source: OECD/AIAS (2023), ICTWSS Database Visser (2019) and own calculations.

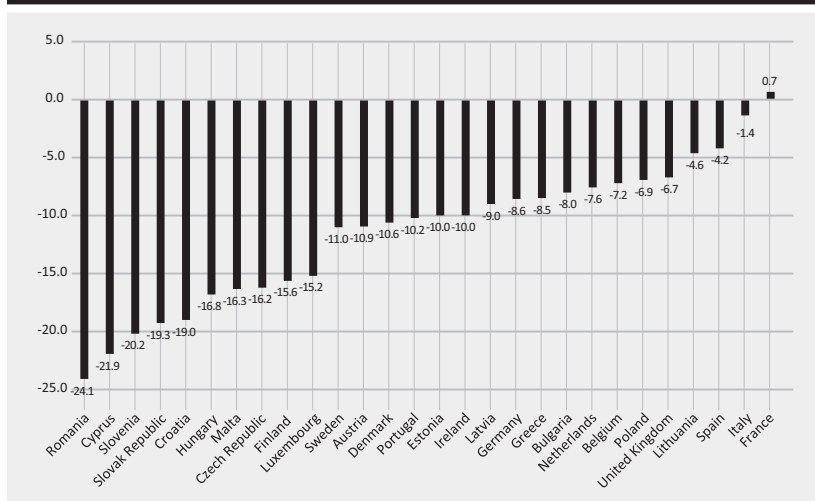
Figure A2 Union density in the EU (%), 2021 or latest available year.



Note: *Union density*: Proportion of employees who are member of a trade union among all employees.

Source: OECD/AIAS (2023), ICTWSS Database Visser (2019), Kjellberg (2023) for Sweden and own calculations.

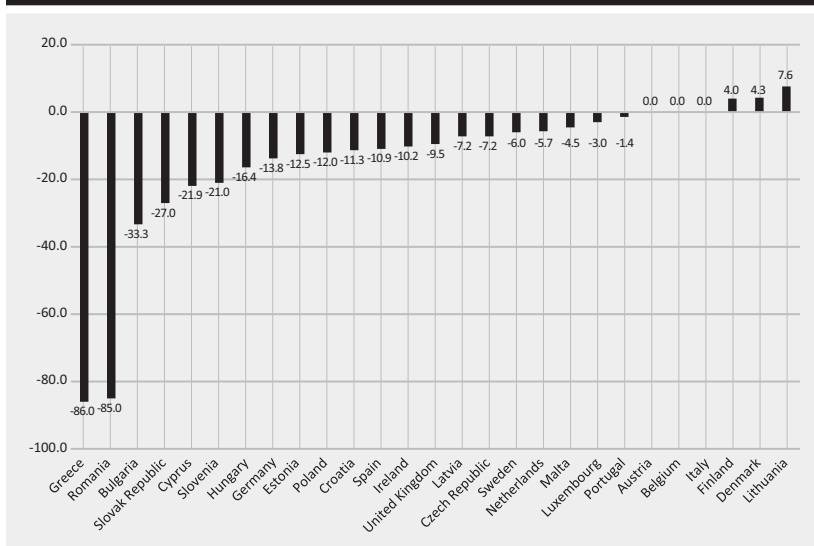
Figure A3 Variation in union density in the EU (%), 2000–2021 or latest available year.



Note: *Union density*: Proportion of employees who are member of a trade union among all employees.

Source: OECD/AIAS (2023), ICTWSS Database Visser (2019), Kjellberg (2023) for Sweden and own calculations.

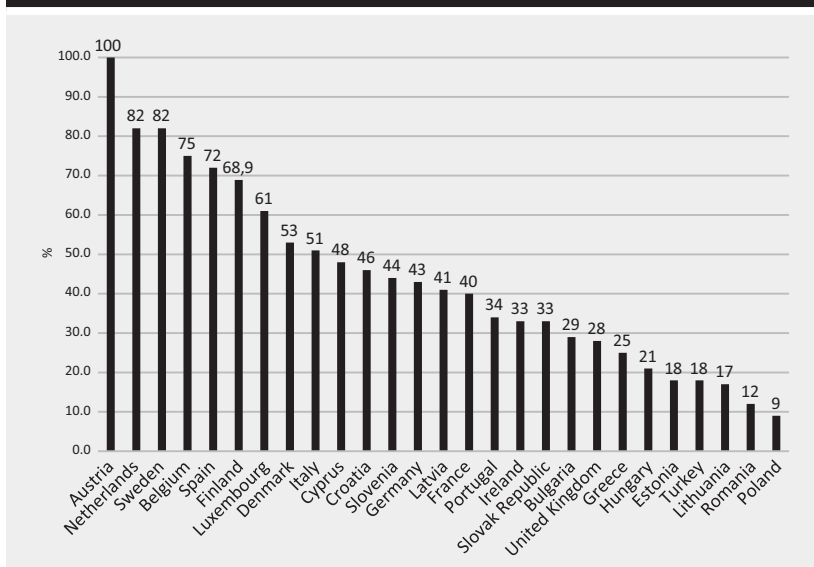
Figure A4 Variation in collective bargaining coverage rates 2000–2021, percentage points.



Note: *Collective Bargaining Coverage rate*: Proportion of employees covered by collective (wage) agreements in force among employees with the right to bargain.

Source: OECD/AIAS (2023), ICTWSS Database Visser (2019) and own calculations.

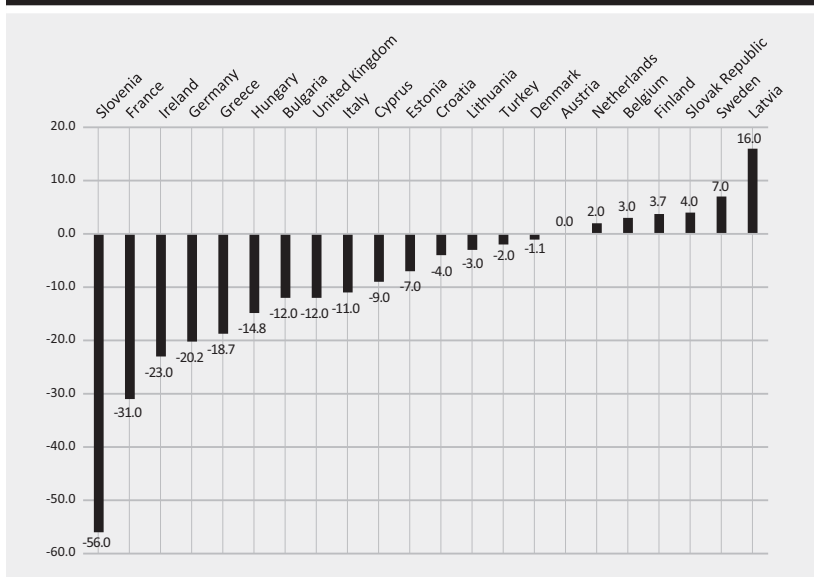
Figure A5 Employers' organisation density in the private sector in 2017 [%].



Note: *Employer Density*: Share of workers employed in companies affiliated to an Employer Association.

Source: OECD/AIAS (2023), ICTWSS Database Visser (2019) and own calculations.

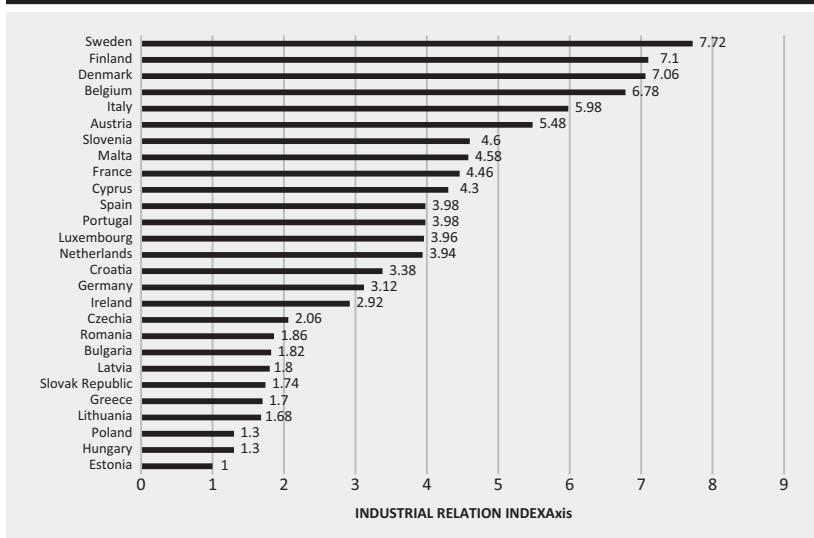
Figure A6 Variation of employers density in the private sector 2000-2017, percentage points.



Note: *Employer Density*: Share of workers employed in companies affiliated to an Employer Association.

Source: OECD/AIAS (2023), ICTWSS Database Visser (2019) and own calculations.

Figure A7 Adjusted industrial relations index, 2021.

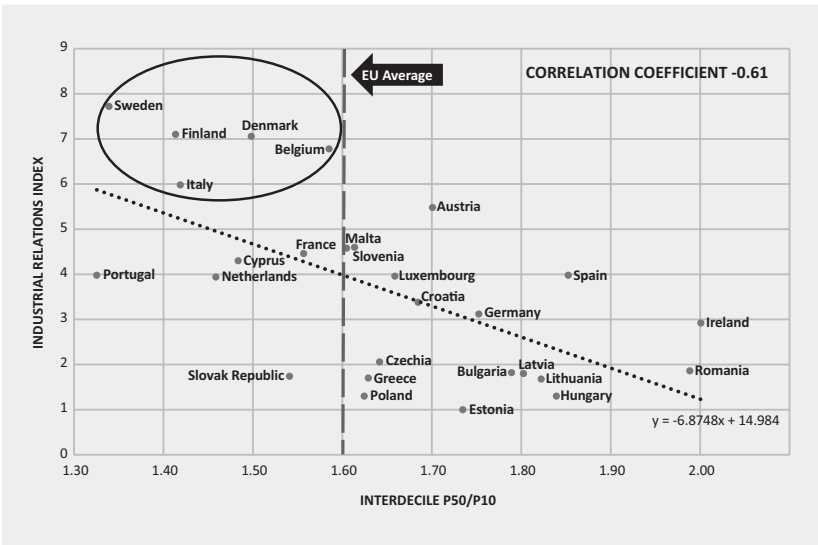


Note: *Adjusted Industrial Relation Index (IRI)*: Weighted average of Union Density (UD) and Coverage Rate of Collective Bargaining (COV).

$IRI = 1/10 (0.6 \cdot UD + 0.4 \cdot COV)$. The index ranges between 0 and 10. The minimum IRS index is found in Estonia (1) and the maximum in Sweden (7.7).

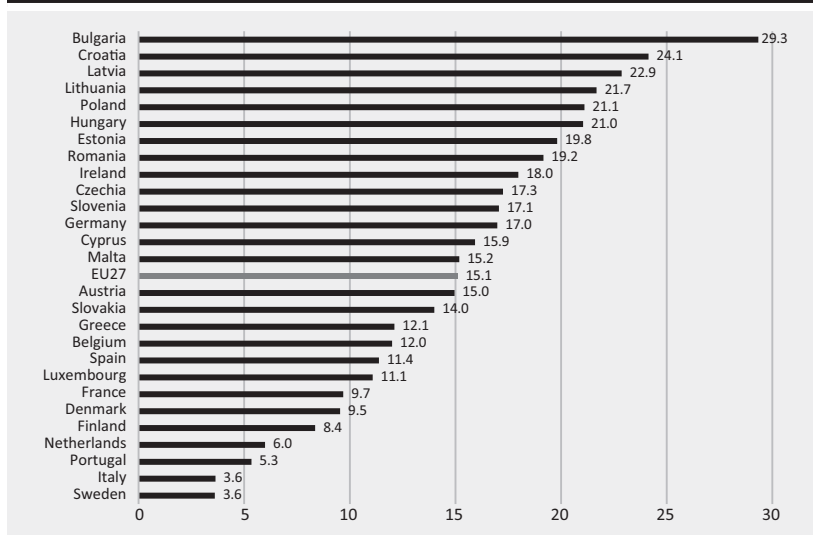
Source: ICTWSS Database, OECD/AIAS (2023) and own calculations.

Figure A8 Interdecile earnings dispersion, interdecile ratio, P50/P10, female workers and adjusted industrial relations index, 2021 or latest available year.



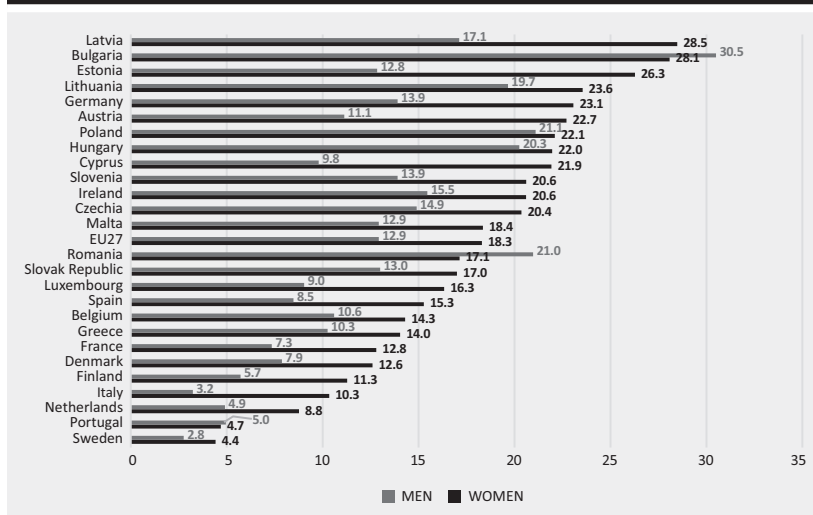
Note: *Adjusted Industrial Relation Index (IRI)*: Weighted average of Union Density (UD) and Coverage Rate (COV)
 $IRI = 1/10 (0.6 \cdot UD + 0.4 \cdot COV)$. The index ranges between 0 and 10. The minimum IRS index is found in Estonia (1) and the maximum in Sweden (7.7).
Decile ratio: The indicators of Decile Ratios of labour earnings are based on gross earnings of full-time dependent employees. This dataset contains three earnings-dispersion measures: ratio of 9th-to-1st (P90/P10), 9th-to-5th (P90/P50) and 5th-to-1st (P50/P10), where ninth, fifth (or median) and first deciles are upper-earnings decile limits (OECD 2023a).
 Source: For interdecile earnings dispersion OECD (2023a). For Industrial Relations System OECD/ALIAS (2023), Visser (2019) and own calculations.

Figure A9 Incidence of low-paid workers (%), 2021.



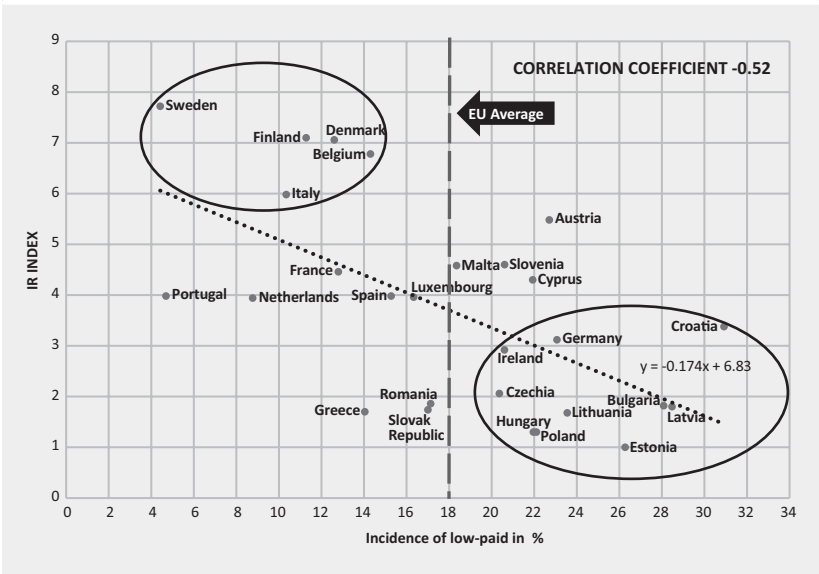
Notes: The incidence of low pay refers to the share of dependent employees earning less than two-thirds of median earnings. Data refer to full-time employees and gross labour earnings, that is, before the deduction of income tax and social security contributions payable by the employee. Source: OECD (2013a) and own calculations.

Figure A10 Incidence of low-paid workers by gender (%), 2021 or latest available year.



Notes: The incidence of low pay refers to the share of dependent employees earning less than two-thirds of median earnings. Data refer to full-time employees and gross labour earnings, that is, before the deduction of income tax and social security contributions payable by the employee. Source: OECD (2023a) and own calculations.

Figure A11 Incidence of female low-paid workers and adjusted industrial relations index, 2021 or latest available year.



Notes: The incidence of female low-paid workers refers to the share of female dependent employees earning less than two-thirds of median earnings. Data refer to full-time employees and gross labour earnings, that is, before the deduction of income tax and social security contributions payable by the employee. *Adjusted Industrial Relation Index (IRI)*: Weighted average of Union Density (UD) and Coverage Rate (COV) $IRI = 1/10 (0.6 \cdot UD + 0.4 \cdot COV)$. The index ranges between 0 and 10. The minimum IRS index is found in Estonia (1) and the maximum in Sweden (7.7).

Source: OECD (2013a) and own calculations.

Tables

Table A1 EU Member States with <i>de jure</i> and or <i>de facto</i> erga omnes clauses at the industry level.	
Nordic and Ghent system countries	Belgium
	Denmark
	Finland
	Sweden
Southern countries	France
	Italy
	Spain
	Slovenia
Northern and Central European countries	Austria
	Luxembourg
	The Netherlands
Central and Eastern European countries	Estonia
	Latvia
	Lithuania
	Czech Republic
	Slovak Republic
	Hungary
English-speaking countries	Ireland

Notes: *Erga omnes*: literally in Latin, “towards everybody”. In labour law, the term refers to the extension of agreements for all workers, not only for members of the signatories’ unions. This is fixed either by law (*de jure*) or is a standard practice (*de facto*).
Source: OECD (2019) and Müller et al. (2019).

Table A2 Administrative extensions mechanisms (or functional equivalent) in place in EU Member States, 2020, and criteria.

Country	Criteria	Frequency
Belgium	Bargaining parties must be representative.	Frequent extension
Finland	50% bargaining coverage Agreement must be concluded by representative bargaining parties. Agreement must be valid for the whole of Finland.	Frequent extension
France	Representative trade union (30% at last workplace elections). Agreement not opposed by a trade union having received more than 50% of the votes; nor by industrial employers' association representing more than 50% of the employees of affiliated companies.	Frequent extension
Luxembourg	National Conciliation Office must support extension.	Frequent extension
Netherlands	Employers' organization must cover at least 60% of employees. Extension must not conflict with general interest.	Frequent extension
Slovenia	At least one representative trade union and employers' association must sign agreement. Employers covered by agreement must cover more than 50% of employees.	Frequent extension
Spain	Signatory parties must represent at least 50% of employees.	Frequent extension
Bulgaria	Bargaining parties need to be representative.	Rare extension
Croatia	Agreement must be signed by most representative trade union and employers' association. Agreement must be in public interest.	Rare extension
Czechia	Signatory must be most representative trade union and employers' association.	Rare extension
Germany	Agreement needs to be in public interest.	Rare extension
Ireland	Court must take into consideration implications for competitiveness and employment levels.	Rare extension
Portugal	Extension must fulfil the principle of equal pay for equal work.	Frequent extension
Slovakia	Agreement needs to be representative, i.e. trade unions need to be established in at least 30% of employers affiliated to the signatory employers' association.	Rare extension
Austria	The Chamber system (<i>Kammersystem</i>) provides for compulsory membership for almost all firms in the chamber of economy (<i>Wirtschaftskammer</i>). Compulsory membership ensures that all sectoral/industry agreements signed by the Chamber apply to all companies in the industry.	Chamber System
Estonia	Most representative organization in the industry must have signed the agreement.	Rare extension
Greece	Employers affiliated to the signatory employers' association must employ at least 51% of employees in the industry.	Rare extension
Latvia	Signatory employers' association must represent at least 50% of employees and generate at least 50% of the turnover in the industry.	Rare extension
Lithuania	Bargaining parties have to specify motives for extension.	Rare extension
Poland	Extension must satisfy 'vital social interest'.	Rare extension
Romania	Signatory employers' association must represent at least 35% of employees.	Rare extension

Note: Extension or administrative extension corresponds to the act of extending the terms of collective agreements at sectoral level also to workers in firms that have not signed the agreement or are not affiliated to an employer organisation that signed the agreement. Extension mechanisms do not exist in Denmark, Greece, Ireland, Poland, Sweden, and the United Kingdom.

Source: Anxo (2021), Müller et al. (2019), OECD (2019) and Visser (2019).

Table A3 Organisations involved in the determination of the minimum wage level in the European Union, 2023.		
Independent Expert Committee	Tripartite Bodies	Other, bipartite agreement or rule-based mechanism or combination
Croatia France, Germany, Ireland, Malta, Romania	Bulgaria, Croatia, Czech Republic, Hungary, Ireland, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Portugal, Romania, Slovakia, Slovenia, Spain.	Croatia, Belgium, France, Germany, Ireland, Luxembourg, the Netherlands, Poland

Source: Eurofound 2023.

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Sammanfattning på svenska

EU-direktivet om tillräckliga minimilöner, en viktig rättsakt som syftar till att stärka EU:s sociala dimension, antogs av Europaparlamentet och rådet i oktober 2022 och ska införlivas i nationell lagstiftning senast i november 2024. Direktivet har två sammanhängande mål: att säkerställa tillräckliga minimilönenivåer och att stärka kollektivförhandlingar. Mot den bakgrunden erkänner direktivet den positiva roll som dialogen mellan arbetsmarknadsparter och minimilönereglering kan spela för att främja inkluderande ekonomisk tillväxt och social sammanhållning, genom att begränsa social utslagning och ojämlikhet i inkomster.

Det bör betonas att direktivet inte ålägger medlemsstaterna att införa en lagstadgad minimilön, eller att förklara kollektivavtal allmänt tillämpliga när lönebildningen uteslutande sker via kollektivavtal, vilket är fallet i de nordiska länderna, Österrike och Italien. Direktivet syftar inte heller till att fastställa en enhetlig minimilönenivå i hela EU. Syftet är snarare att ange vissa kriterier, till exempel en minimilön som motsvarar 60 procent av medianlönen, för att säkerställa att adekvata minimilöner fastställs på nationell nivå.

För de 22 EU-medlemsstater som har lagstadgade minimilöner anger direktivet följande uttryckliga mål när det gäller att fastställa lämpliga nivåer: förbättra levnads- och arbetsvillkor för arbetstagare med målet att kvinnor och män ska ha en skälig levnadsstandard, minska löneskillnaderna, bidra till att minska löneskillnaderna mellan könen, reducera inkomstskillnaderna genom att minska fattigdom bland förvärvsarbetande och bidra till att främja social sammanhållning och ökad social konvergens inom EU. En annan del i direktivet hanterar frågan om täckningsgrad och berör alla medlemsstater; målet är att 80 procent av arbetstagarna ska täckas av kollektivavtal.

Syftet med denna rapport är att analysera de potentiella socioekonomiska konsekvenserna av EU-direktivet om tillräckliga minimilöner, med utgångspunkt i en genomgång av den teoretiska och empiriska litteraturen om minimilöner. I rapporten anläggs ett institutionellt perspektiv och ett jämställdhetsperspektiv, med målet att utvärdera i vilken utsträckning direktivet kan utgöra ett effektivt instrument för att förbättra löner och arbetsvillkor för män och kvinnor i Europa, vända trenden med ökande ojämlikhet, bidra till att minska lönegapet mellan könen och reducera inkomstskillnaderna mellan könen genom att minska fattigdomen bland förvärvsarbetande.

Den senaste och mer omfattande forskningsstudien visar att måttliga minimilöneökningar inte tycks påverka sysselsättningen negativt, varken för män eller för kvinnor.⁹⁵ Empiriska studier om hur minimilöner påverkar

⁹⁵ En ökning på upp till 60 procent av medianlönen, se Dube (2019).

lönefördelningen tyder överlag på att höjda minimilöner medför ökade löner för lågavlönade. Detta ger starka belägg för att minimilöner, genom att komprimera lönestrukturen i den nedre delen av lönefördelningen, särskilt minskar ojämlikheten för kvinnor som är överrepresenterade bland lågavlönade. En måttlig ökning av minimilönen verkar dessutom inte bara ha en utjämnande effekt på lönerna utan också på inkomstfördelningen i den nedre delen av lönefördelningen. Hur ökade minimilöner påverkar inkomstfördelningen mellan hushållen är mer kontroversiellt; en studie från USA visar dock på positiva fördelningseffekter och en minskning av antalet fattiga hushåll bland förvärvsarbetande.

Vad gäller frågan om minimilöners påverkan på lönegapet mellan kvinnor och män visar genomgången att en höjning av minimilönerna faktiskt bidrar till att minska lönegapet mellan könen. Denna forskning ligger i linje med Europeiska kommissionens bedömning att en höjning av minimilönerna förväntas minska lönegapet med i genomsnitt cirka 5 procent.

Mot bakgrund av direktivets mål om ökad kollektivavtalsäckning analyseras även relationerna mellan arbetsmarknadens parter i EU. Analysen visar att vissa faktorer – hög facklig anslutningsgrad och kollektivavtalsäckning, balanserad förhandlingsstyrka mellan arbetsmarknadens parter, centraliserade och samordnade kollektivavtalssystem (med flera arbetsgivare) – inte bara verkar främja bättre arbetsvillkor, jämställda löner och jämställdhet, utan även ekonomisk tillväxt och social sammanhållning. Parter med inflytande över arbetsmarknaden och en utvecklad dialog (treparts- och/eller tvåpartsdialog), som i de nordiska länderna eller i Belgien, är en modell som med andra ord verkar förena ekonomisk effektivitet med social rättvisa. Den modellen ser också ut att vara bättre anpassad för att möta utmaningar som är förenade med globalisering, demografisk utveckling, tekniska förändringar och grön omställning. Rapporten visar vidare att minimilöner tenderar att ha större effekter på löneutjämningen när de kombineras med starka fackföreningar och hög kollektivavtalsäckning.

När det gäller jämställdhet och relationerna mellan arbetsmarknadens parter visar forskning att de högre lönegolv som finns i länder med hög facklig organisationsgrad, hög täckningsgrad för kollektivförhandlingar och centraliserad lönesättning, också medför högre löner för kvinnor och minskar lönegapet mellan könen. Det hänger samman med att kvinnor är mer representerade bland lågavlönade. I överensstämmelse med dessa resultat bör direktivets mål – det vill säga att öka kollektivavtalsäckningen i alla medlemsstater till 80 procent och, för de medlemsstater som har minimilöner, aktivt involvera arbetsmarknadens parter i fastställandet av minimilönerna – leda till minskade lönegap mellan könen.

Analysen visar dessutom att de nordiska länderna och Belgien också uppvisar de högsta siffrorna i EU:s jämställdhetsindex. I dessa länder är kvinnors representation i nationella parlament och politiska organ bland de högsta i världen; kvinnors

höga fackliga organisationsgrad och engagemang i kollektivförhandlingar bidrar till att jämställdhetsfrågor förs upp på den politiska dagordningen. Att allt fler kvinnor deltar i arbetskraften, i kombination med de stora förändringarna i sysselsättningsstrukturen – från tillverkningsindustrin till tjänstesektorn – innebär att den fackliga organisationsgraden i de nordiska länderna idag är betydligt högre för kvinnor än för män. Länder med fragmenterade arbetsmarknadsrelationer, låg facklig anslutningsgrad, låg täckningsgrad för kollektivförhandlingar och mindre engagemang från arbetsmarknadens parter har tvärtom de lägsta resultaten i EU:s jämställdhetsindex.

Vad som bör prioriteras är således arbetsmarknadsparternas representativitet, självständighet samt institutionella kapacitet att forma arbetsmarknaden (och sociala normer). En sådan politisk strategi ligger också i linje med direktivets syfte att främja social dialog och kollektivförhandlingar på nationell nivå för att säkerställa fastställandet av tillräckliga minimilönenivåer. Dessa miniminivåer kan i sin tur möjliggöra en skälig levnadsstandard, reducera löneskillnaderna, bidra till att minska lönegapet mellan könen, minska andelen lågavlönade arbetstagare och bidra till uppåtriktad social konvergens inom Europeiska unionen.

Direktivet pekar på att EU:s politiska mål är att ändra riktning och stödja system med bredare kollektivavtalsäckning och starka och självständiga arbetsmarknadsparter. Det är dock fortfarande en lång väg kvar att gå för att nå dit. Särskilt lång väg är det för de medlemsstater som har decentraliserade, icke samordnade och fragmenterade förhandlingssystem, vilket är vanligt i de flesta central- och östeuropeiska länder. Dessa länder kännetecknas av såväl låg facklig organisationsgrad som låg täckningsgrad för kollektivavtal och förhandlingar, och de är således långt ifrån direktivets mål om en täckningsgrad på 80 procent vad gäller kollektivavtal. Både medlemsstaterna och EU kommer därför att behöva ge politiskt, ekonomiskt och institutionellt stöd för arbetsmarknadsmodeller som bygger på självständiga och starka parter som kan föra en konstruktiv dialog.

Slutsatsen är att EU-direktivet om tillräckliga minimilöner – i synnerhet målet att uppgadera den lägsta löneinkomsten – kan bidra till bättre löner och arbetsvillkor samt minska skillnaderna i löner och inkomster mellan könen i den nedre delen av lönefördelningen. Man bör dock komma ihåg att det fortfarande krävs fler politiska instrument för att hantera könsskillnader, exempelvis i arbetskraftsutbudet. Det kan till exempel handla om att upprätthålla och utveckla offentliga tjänster, allmän barnomsorg och äldreomsorg, generösa och flexibla system för föräldraledighet, fler möjligheter till livslångt lärande samt könsneutrala skatte- och trygghetssystem.

‘In light of these findings, a priority should indeed be to strengthen the representativeness and autonomy of social partners and their institutional capacity to shape labour market and social norms.’

Dominique Anxo



SIEPS carries out multidisciplinary research in current European affairs. As an independent governmental agency, we connect academic analysis and policy-making at Swedish and European levels.