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IMPACT ASSESSMENT

Accompanying the document

Proposal for a Directive of the European Parliament and of the Council

on adequate minimum wages in the European Union

{COM(2020) 682 final} - {SEC(2020) 362 final} - {SWD(2020) 246 final}

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Abbreviations

Acronym	*Meaning or definition*
CJEU	Court of Justice of the European Union
CSR	Country Specific Recommendation
DG ECFIN	Directorate-General for Economic and Financial Affairs, European Commission
DG EMPL	Directorate-General for Employment, Social Affairs and Inclusion, European Commission
ECB	European Central Bank
EMCO	Employment Committee
EPC	Economic Policy Committee
ESDE	"Employment and Social Developments in Europe", Annual Report of the European Commission
Eurofound	European Foundation for the Improvement of Living and Working Conditions
EWCS	European Working Conditions Survey
IA	Impact Assessment
ILO	International Labour Organization
JRC	Joint Research Centre, European Commission
LFS	Labour Force Survey
LMWD	Labour Market and Wage Developments in Europe", Annual Review of the European Commission
MS	Member States
OECD	Organisation for Economic Co-operation and Development
REFIT	European Commission's Regulatory Fitness and Performance programme
RSB	Regulatory Scrutiny Board
SES	European Union Structure of Earnings Survey
SMEs	Small and medium-sized enterprises
SPC	Social Protection Committee
SWD	Staff Working Document
TFEU	Treaty on the Functioning of the European Union

Country and region codes:

EU	European Union
EA	Euro area
AT	Austria
BE	Belgium
BG	Bulgaria
CY	Cyprus
CZ	Czechia
DE	Germany
DK	Denmark
EE	Estonia
EL	Greece
ES	Spain
FI	Finland
FR	France
HR	Croatia
HU	Hungary
IE	Ireland
IT	Italy
LT	Lithuania
LU	Luxembourg
LV	Latvia
MT	Malta
NL	The Netherlands
PL	Poland
PT	Portugal
RO	Romania
SE	Sweden
SI	Slovenia
SK	Slovakia
UK	United Kingdom

1 INTRODUCTION: POLITICAL AND LEGAL CONTEXT

In recent decades, low wages[1] have not kept up with other wages in many Member States, thus affecting in-work poverty, wage inequality, and the capacity of low-wage earners to cope with economic distress. Ensuring that all EU workers earn adequate wages is essential for their wellbeing and for supporting sustainable and inclusive growth. Minimum wages play an important role in this context.

The current crisis has bolstered the demand for EU action to ensure that minimum wages allow for a decent living. The EU has been hit hard by the Covid-19 outbreak, with a significant loss of human lives and negative effects on Member States' economies, businesses, and the income of workers and their families. The crisis has particularly hit sectors with a higher share of low-wage workers such as retail and tourism, and it is likely to have a stronger impact on vulnerable workers. Ensuring a decent living for all workers is critical for supporting a sustainable and inclusive recovery. Therefore, minimum wages are key to ensure an inclusive recovery from the current crisis, as well as to make our economies fairer and more resilient.

The right of workers to fair and just working conditions is outlined in several EU political and strategic documents. The Charter of Fundamental Rights of the European Union (Article 31: 'Fair and just working conditions') recognises the right of all workers to working conditions which respect their health, safety and dignity. The European Pillar of Social Rights, proclaimed in November 2017 by the Council of the EU, the European Parliament and the Commission, as well as social partners, in its Principle 6 on 'Wages', calls for adequate minimum wages, and transparent and predictable wage setting. These objectives are reflected in the call for a fair and social Europe in the Strategic Agenda for 2019-2024, agreed at the European Council in June 2019. In the Political Guidelines for the new Commission (2019-2024), President Ursula von der Leyen stated: *"I will propose a legal instrument to ensure that every worker in our Union has a fair minimum wage. This should allow for a decent living wherever they work. Minimum wages should be set according to national traditions, through collective agreements or legal provisions.*"[2]

In line with Article 154 TFEU, the Commission has carried out a two-stage consultation of social partners on possible EU action in the area of minimum wages. During the first-stage consultation, between 14 January and 25 February 2020, social partners were consulted on the need and possible direction of EU action.[3] This was

[1] In statistical terms, a low-wage is defined as a wage lower than two thirds of the national median wage.
[2] "A Union that strives for more. My agenda for Europe." Political Guidelines for the European Commission 2019-24.
[3] Consultation Document of 14.1.2020, First phase consultation of social partners on possible EU action addressing the challenges related to fair minimum wages, C(2020) 83 final.

followed by a second phase between 3 June and 4 September 2020.[4] The social partners decided not to launch the negotiations foreseen in Article 155 TFEU.

This initiative **aims at improving working conditions by ensuring that workers in the Union have access to adequate statutory minimum wages, where they exist, or wages set by collective agreements, thus allowing for a decent living wherever they work**. Therefore, the specific objectives of the initiative are to improve the adequacy and to increase the coverage of minimum wages. Thus it forms part of the European Commission's social policy and is coherent with and supports other actions implemented in this field over the last years.[5]

In her Political Guidelines, President Ursula von der Leyen has also committed to fully implement the European Pillar of Social Rights. To this end, in January 2020, the Commission presented a Communication on building a strong social Europe for just transitions, which set out the road towards an Action Plan to implement the Social Pillar including the initiative on minimum wages among the key actions to be pursued. The minimum wage initiative is consistent with other actions foreseen within this framework, notably with the measure to introduce a European Gender Equality Strategy to advance in closing the gender pay gap, including through binding pay transparency measures.

2 PROBLEM DEFINITION

Minimum wage protection can be provided by collective agreements or by statutory minimum wages set by legislation. There are six Member States where minimum wage protection is provided by collective agreements: Austria, Cyprus, Denmark, Finland, Italy and Sweden. Of these Member States, Cyprus has also statutory minimum wages covering some low-wage occupations. The other 21 Member States have statutory national minimum wages, that is, statutory minimum wages that apply universally in the country (as opposed to applying only to some occupations as in Cyprus). In all Member States with statutory national minimum wages, collective agreements set wages above the statutory minimum wages in a number of sectors. Annex 6 provides more detail of minimum wage setting institutions by Member State.

[4] Consultation Document of 03.06.2020, "Second phase consultation of social partners on possible EU action addressing the challenges related to fair minimum wages" C(2020) 3570 final accompanied by an analytical document.
[5] In particular: Council Decision (EU) 2018/1215 of 16 July 2018 on guidelines for the employment policies of the Member States; Commission Recommendation of 3 October 2008 on the active inclusion of people excluded from the labour market; Directive 2019/1152/EU on transparent and predictable working conditions in the European Union; Directive 2000/78/EC against discrimination on grounds of religion or belief, disability, age or sexual orientation in employment and occupation; Directive 2006/54/EC on the implementation of the principle of equal opportunities and equal treatment of men and women in matters of employment and occupation; Directive 2014/67/EU on the enforcement of Directive 96/71/EC concerning the posting of workers in the framework of the provision of services and amending Regulation (EU) No 1024/2012 on administrative cooperation through the Internal Market Information System; Directive 2014/23/EU on the award of concession contracts; Directive 2014/24/EU on public procurement and repealing Directive 2004/18/E; and Directive 2014/25/EU on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC.

During the social partners' and the targeted consultation process, there was a general agreement amongst stakeholders on the importance of protecting workers with adequate minimum wages. However, many workers are currently not protected by adequate minimum wages in the EU. In some cases, the level of minimum wages cannot be considered as adequate. In others, there are workers who do not have access to the protection of minimum wages. The rest of this section lays out various aspects of this problem (Section 2.1), discusses its drivers (Section 2.2 to 2.5), its consequences (Section 2.6) as well as how the problem may evolve (Section 2.5).

The stakeholders generally showed support for most of the objectives of the initiative. Specifically, the workers' organisations considered that statutory minimum wages are not always adequate while several employers' organisations agreed with the importance of adequate minimum wages. Along the same lines, there was a general agreement among Member States' representatives that ensuring adequate minimum wage levels and coverage for all forms of work can contribute to the achievement of upward social convergence and to the fight against poverty, including in-work poverty (see Annex 2 for more details). However, views on the need of EU action differed and employer organisations and Nordic unions did not agree that an EU action in this area would be needed.

2.1 What is the problem?

2.1.1 Insufficient adequacy

Minimum wages can be considered adequate when they are fair vis-à-vis the wages of other workers and when they provide a decent standard of living, taking into account general economic conditions in the country.[6] While the first aspect of adequacy is formulated in a "relative" way, i.e. including an element of comparison, and the other in an "absolute" way, both are closely related. This is because even the concept of a "decent standard of living" is usually defined in a relative way.

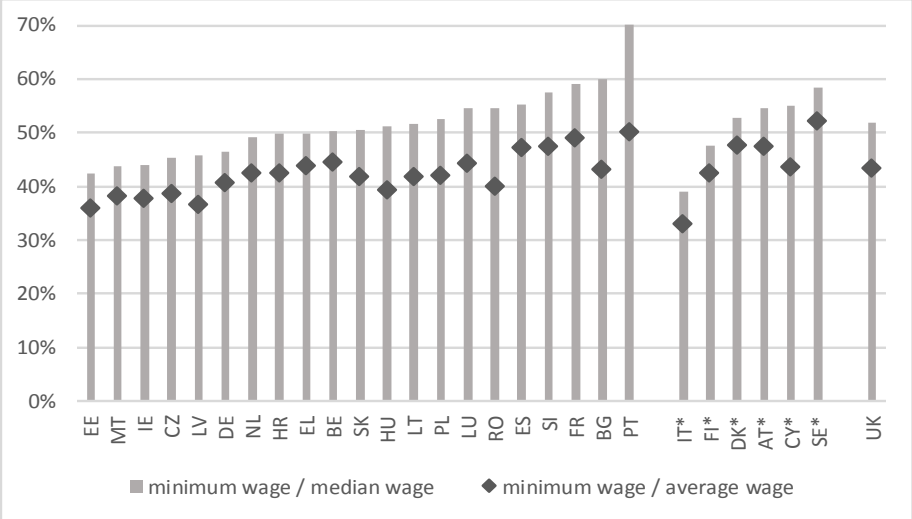
This section (and Annex A8.2) present indicators operationalising both aspects of adequacy to allow for a complex assessment of adequacy of minimum wages. First, the aspect of fairness in comparison to other wages is operationalised by the ratio of the gross minimum wage to the gross median wage as well as to the gross average wage. Second, adequacy as providing a decent living standard is operationalised by the ratio of the net income of minimum wage earners to the poverty (AROP) threshold as well as to the net average wage. All these adequacy indicators compare minimum wages to other people's wages or incomes. Both aspects of minimum wage adequacy, and all indicators

[6] For a more detailed discussion of both aspects of adequacy, including indicators to measure them, see Annex A8.2.

listed, are relevant independently of the wage distribution or the general level of wages. All are used in this section to assess problems of adequacy of statutory minimum wages[7].

While the adequacy of statutory minimum wages has improved in several countries in recent years, it is still low in a number of Member States, based on all main indicators. In almost all Member States, the statutory minimum wage is below 60% of the median wage and 50% of the average wage (Graph 1). In 2019, only the statutory minimum wage of Portugal reached both values, while that of Bulgaria reached 60% of the median. Further, in the same year, the statutory minimum wage was below 50% of the median wage in nine EU countries (Estonia, Malta, Ireland, Czechia, Latvia, Germany, the Netherlands, Croatia and Greece). In three of these countries (Estonia, Malta and Ireland), it was even below 45%. Moreover, seven countries (Estonia, Malta, Ireland, Czechia, Latvia, Hungary and Romania) had minimum wages below 40% of the average wage. In Member States where minimum wage protection is provided by collective agreements (with the exception of Italy[8]), wages set in collective agreements for low-paid occupations are generally high when compared to statutory minimum wages in other countries.[9]

Graph 1: Minimum wages, expressed as a percentage of the gross median and average wage of full-time workers, 2019

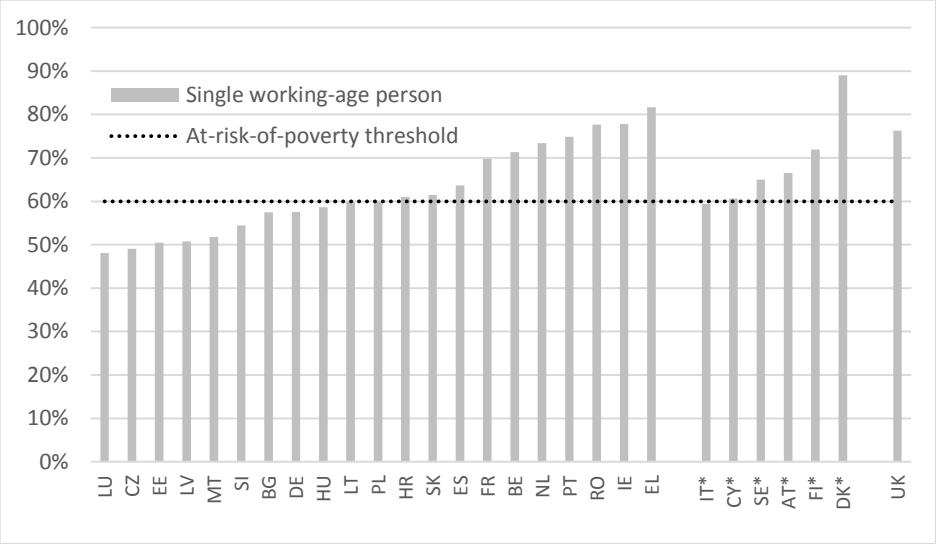


Notes: * For AT, DK, FI, IT and SE, information on collective agreements covering low-paying job categories (average of 3 lowest rates; for CY information on occupational statutory minimum wages) was taken from Eurofound (2020): Minimum wages in 2020 - Annual review, while information on median and average wages was provided by Eurostat.
Source: Commission calculations based on Eurostat data.

[7] A discussion of their relative merits for the purposes of setting reference values is included in Section 5 (on policy options) and Section 6 (on impacts) as well as the Annexes supporting these, in particular, Annex A12.9.
[8] Various data collection methodologies result in qualitatively different results about collectively agreed wages in Italy. Such a methodological change explains the difference between these updated data and those shown in the analytical document accompanying the second-stage consultation of social partners.
[9] When controlling for the level of economic development, Boeri (2012) finds that collective bargaining involves a 12-13 percentage points higher ratio of the minimum wage to the average wage. See Boeri, Tito: "Setting the minimum wage", *Labour Economics*, Vol. 19 (3), June 2012, Pages 281-290.

In nine Member States, the statutory minimum wage did not protect minimum wage earners against the risk of poverty in 2018 (Graph 2). Countries where the minimum wage was not sufficient to help a single worker avoid the risk of poverty are Bulgaria, Czechia, Estonia, Germany, Hungary, Latvia, Luxembourg, Malta and Slovenia.[10] In ten Member States, statutory minimum wages also fell short of the standard of adequacy defined by the Council of Europe.[11]

Graph 2: Net income of single minimum wage earners working full-time, relative to the at-risk-of poverty threshold, 2018



Notes: An individual is at the risk of poverty if he or she lives in a household with an income below 60% of net median household income, adjusted for household composition, in the same country. This is the standard definition of monetary poverty in EU social statistics. The single childless persons considered in this graph are not entitled to social assistance and housing benefits.
Source: European Commission calculations based on OECD TaxBen model. Comparable wages set in collective agreements in Member States without statutory minimum wages (marked by *) were taken from Eurofound (2020): Minimum wages in 2020 – Annual Report. The at-risk-of poverty threshold is based on Eurostat flash estimates for BE, DE, ES, FR, IE, LT, LU, MT, PT, SK, UK, CY and IT. For all other countries, official Eurostat data have been used.

Taken together, 14 Member States had a statutory minimum wage below either 50% of the median wage or not sufficient to reach the poverty line for a single individual. While there are differences across various indicators of minimum wage adequacy, their conclusions are consistent in the case of a number of Member States. In particular, the adequacy of the statutory minimum wage in some Member States ranks consistently among the lowest (e.g. Estonia, Czechia, Lithuania and Malta), or among the highest (e.g. France and Portugal) across the variety of indicators analysed.

The assessment of minimum wage adequacy is more complex in countries where minimum wage protection is provided by collective agreements. This is because comprehensive data on wages set in collective agreements are not available.

[10] The problem exists also for other household types, including single parents with a child (in even more countries than for single workers) and for dual-earner couples, where both earn the minimum wage and have two children.
[11] It compares the net minimum wage to the net average wage. See Graph A8.4 in Annex A8.2.

Representative samples of collective agreements for low-paid occupations have been collected in the past.[12] The available information suggests that there are issues with the adequacy of some minimum wages in Cyprus and Italy (see Graphs 1 and 2 above), although the assessment of adequacy is sensitive to the methodology of collecting representative collective agreements.[13]

Insufficient adequacy affects a large number of workers. About one in six workers are low-wage earners in the EU according to the definition of Eurostat, earning less than two thirds of the median wage, and their share has increased from 16.7% in 2006 to 17.2% in 2014.[14] Their share is lowest in Sweden, Belgium and Finland, while it is highest in Latvia, Romania and Lithuania. In addition, a significant share of workers earns less than 60%, 50% or 40% of the median wage (Graph A8.2 in Annex 8.1).

General wages, as well as minimum wages, have been growing faster in low-wage countries (especially in Central and Eastern European Member States) than in high-wage countries.[15] Despite this trend towards convergence in the last two decades, a large gap remains between the lowest and the highest nominal minimum wages in the EU. In 2019, statutory minimum wages in the EU ranged from EUR 286 in Bulgaria to EUR 2071 in Luxembourg. Taking into account the differences in price levels between Member States (a comparison in "Purchasing Power Standard"), the difference between the lowest and highest statutory minimum wages is about one to three (Graph A8.8 in Annex A8.1), broadly reflecting differences in wage and productivity levels.

2.1.2 Gaps in coverage

In Member States with a statutory national minimum wage, gaps in coverage arise from specific provisions in the minimum wage legislation which allow for exemptions or variations for specific groups of workers.[16] The extent of these gaps

[12] See, e.g. Kampelmann, S, A. Garnero and F. Rycx (2013): "Minimum wages in Europe: does the diversity of systems lead to a diversity of outcomes?", ETUI Report 128; Eurofound (2020): Minimum wages in 2020 – Annual Report, as well as the 2019 issue of the same report.

[13] Studies about the adequacy of wages set in collective agreements have come to various conclusions for Italy in the past. While Kampelmann et al (2013; see references in previous footnote) as well as Eurofound (2019) found comparatively high wages set in collective agreements, the collective agreements in low-wage occupations collected by Eurofound (2020) based on a new methodology, suggest lower wages. This information has been used in Graphs 1 and 2 above.

[14] See Graph A8.1 in Annex A8.1. Based on latest data based on the 2014 wave of EU-SES. The 2018 wave of the survey is expected to be published at the end of 2020. This survey of firms is conducted every four years in the EU, including firms with 10 employees or more. Other sources of information (e.g. the EU-SILC survey) are more up-to-date but involve more reporting error. They confirm a high share of low earners in the EU in more recent years. On the development of this share over time, see Section 2.4.1.

[15] Statutory minimum wage growth was also faster in low-wage countries, even as compared to other wages or to productivity growth; see Graphs A8.9-A8.11 in Annex A8.2. Longer-term trends in wage convergence have been analysed by the European Commission (2018): "Labour market and wage developments in Europe: Annual Review 2018", DG EMPL, Chapter II.2.

[16] "Exemptions" mean that the law exempts some groups from the application of minimum wage rules, while "variations" mean that a specific minimum wage floor applies to specific groups, for instance a lower minimum wage applies to young workers (sometimes referred to as "sub-minima").

appears small based on the regulations that exist in Member States, but exact data are not available.[17] Compliance issues contribute to gaps in coverage (see Section 2.5.5).

In Member States without a statutory national minimum wage, gaps arise because specific groups of workers are not covered by collective agreements.[18] There are substantial differences: The share of workers not covered is around 2% in Austria, 10% in Finland and Sweden, 20% in Denmark and Italy, and around 55% in Cyprus (see also Section 2.5.1 on collective bargaining). Given data issues (see Annex A4.6A4.4), precise information on the wage levels of those not covered by collective agreements is however limited. The share of low-wage workers is significantly higher among the non-covered in Cyprus, similar to those covered in Austria, Denmark and Finland, while information is not available for Italy and Sweden.[19] Also for these countries, compliance issues play a role (see Section 2.4.2).

2.1.3 Which groups, sectors and regions are most affected by the problem?

Women, young and low-skilled workers, single parents, as well as workers with non-standard contracts are more likely to be affected by the problem than other groups.[20] The share of minimum wage earners in the EU is estimated at levels that vary from below 5% (e.g. in Belgium and Malta) to around 20% (in Portugal and Romania).[21] Women have a higher (almost double) probability to earn the minimum wage than men, but the gender differential varies among Member States. In Czechia, Germany, Malta, the Netherlands, and Slovakia women represent over 70% of minimum wage earners. Young people, single parents, low-skilled workers and those with temporary or part-time contracts are more likely to earn minimum wages than other groups. They do not, however, represent the majority of minimum wage earners due to their generally small shares in the workforce. See Annex A7.1 for more detail on the profile of minimum wage earners.

Workers in less densely populated areas have a somewhat higher chance of being minimum wage earners but the differences between types of regions are small overall.[22] On average across all Member States for which data are available, 14% of the employees living in thinly populated areas earn the minimum wage, while there is a lower share of minimum wage earners in intermediate (13%) and densely populated areas (11%). This is linked, among other things, to regional differences in the characteristics of

[17] For a discussion of exemptions, see Section 2.5.4. For a detailed description of regulations in Member States, see Annex A9.4. Estimates based on income surveys such as SILC do not permit to disentangle the effect of different causes such as exemptions, reporting errors (especially related to working time) and non-compliance. See also section 2.5.5 below on data issues related to compliance.
[18] Collective agreements address many aspects of working conditions other than wages. Some collective agreements do not include provisions about wages at all. Nevertheless, collective bargaining coverage is a close proxy of the share of workers protected by minimum wages in countries without statutory minimum wages.
[19] Data extraction from the 2014 wave of the Structure of Earnings Survey, provided by Eurostat.
[20] See Annex A7.1 for detailed information by Member States.
[21] See Graph A7.1 in Annex A7.1.
[22] See Annex A7.2, and especially Graph A4.7, for more detail.

workers as well as the location of various economic sectors (for instance, agriculture in rural areas and finance in dense ones).

In virtually all countries, the majority of minimum wage earners works in the services sectors.[23] The food and accommodation (or hospitality) sector, a sector particularly affected by the Covid-19 pandemic, has a high share of minimum wage earners.[24] Industry and agriculture sectors employ a relatively small share of minimum wage earners in most countries, but this share is higher in some Central and Eastern European Member States. Industry accounts for a low share of minimum wage earners in some Member States (less than 10% in Belgium and Luxembourg), while its weight exceeds 30% in some Central and Eastern European Member States (such as Bulgaria, Czechia, Croatia, Slovakia, Poland, and Romania). The share of minimum wage earners in agriculture is less than 10% in all Member States.

Micro and small enterprises employ a majority of minimum wage earners but there is a variety of patterns across the EU.[25] Firms with less than 50 workers employ more than 80% of minimum wage earners in Bulgaria, Estonia, Greece, Latvia, Slovakia and Spain (as well as in Cyprus, Finland and Italy, in the case of low-wage earners) while their weight is below 60% in Germany, the Netherlands and Slovenia.

2.2 External drivers

The situation of low-wage workers[26] and the level of minimum wages are also influenced by factors beyond the scope of this initiative. They include megatrends (e.g. globalisation and technological and demographic changes) and policy areas other than minimum wage setting (e.g. taxes and benefits).

The proportion of low-wage workers is affected by changes in the structure of the economy and demographic factors related to skills. Globalization and technological change are increasing productivity and living standards on average, but some workers may be left behind. Increased automation, digitisation, and robotisation have significantly contributed to job polarisation in the EU: a decline of employment in medium-paid (or medium-skilled) occupations and a simultaneous increase of low- and high-paid (or skilled) occupations.[27] This has contributed to wage inequality.[28]

[23] See Annex A7.2, and especially Graph A7.6, for more detail.
[24] See Annex A7.2, and especially Graph A7.7, for more detail.
[25] See Annex A7.2, and especially Graph A7.8, for more detail.
[26] Increases in the share of low-wage earners exceeded one percentage point in Czechia, France, Germany, Greece, and Spain, as well as in the euro area as a whole. In percentage terms, this share also increased significantly in Finland and Sweden, albeit from very low levels. In contrast, in some Member States, including most Eastern European countries, the share of low-wage earners declined.
[27] See for example: Sebastian, R. and F. Biagi (2018), "The Routine Biased Technical Change hypothesis: A critical review", JRC Technical Reports, Publications Office of the European Union, Luxembourg; European Commission (2019): LMWD 2019 Report, DG EMPL.

The share of non-standard workers, who are much more likely to receive the minimum wage, has increased. The proportion of permanent full-time employment (also called "standard" employment) has declined from 62% to 59% in the EU-28 over the period 2002-2016.[29] It has been estimated that the remuneration of employees on open-ended contracts is (on average) at least 13% higher as compared to similar workers on temporary contracts. The gap is even larger for low-wage earners.

Taxes and benefits affect the living standards of minimum wage earners. Personal income taxes and social security contributions can significantly reduce the take-home pay of minimum wage earners (see Graph A8.5 in Annex 8.2).

2.3 Internal drivers

Internal drivers refer to the root causes of insufficient minimum wages and gaps in coverage that will be tackled by the initiative. This section discusses five main internal drivers: (1) Negative trend in collective bargaining coverage, affecting adequacy and coverage; (2) Insufficiently clear framework for setting statutory minimum wages (including criteria for adequacy, frequency and regularity of updates); (3) Insufficient involvement of social partners in MW setting; (4) Exemptions for some groups in statutory systems; lower minima (variations) for other groups; (5) Imperfect compliance. A summary of these drivers is presented in this section; Annex 9 provides more detail and background and Table A9.5 presents a summary of the internal drivers per Member State, including observations on their potential impact on adequacy and coverage.

Internal drivers affect both aspects of the problem (coverage and adequacy of minimum wages) differently according to whether minimum wages are set via collective bargaining or legal provisions. A detailed visualisation of how they affect both aspects of the problem in each system is provided by Graph 3. As panel (a) of Graph 3 shows, the adequacy and coverage of minimum wages in countries solely with collective bargaining systems are affected by declining collective bargaining coverage and imperfect compliance. In countries where statutory national minimum wages also exist (panel b), adequacy and coverage of minimum wages are not only affected by those two factors but also by specific features of the systems such as the way minimum wages are updated or the existence of exemptions or variations. Internal drivers affect adequacy or coverage differently across both systems. For instance, collective bargaining is an indirect driver of the adequacy of minimum wages in statutory systems, but it directly drives both adequacy and coverage in systems relying on collective bargaining. Furthermore, while exemptions from statutory minimum wages affect coverage,

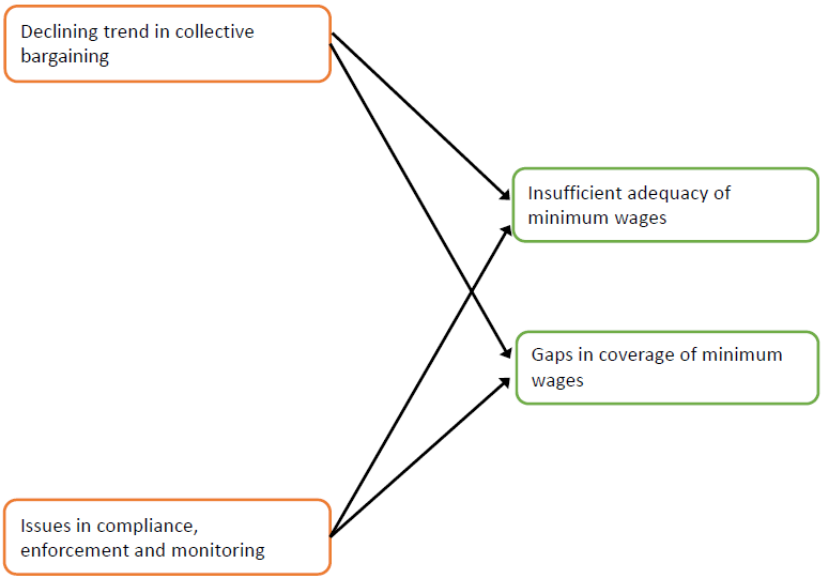
[28] For instance, Jensen et al. (2019) find that, between 1997 and 2007 in the EU-15, "[o]n average, the Gini of wage inequality has increased by 0,6 percentage points as a direct effect of job polarization". See: Jensen, T.L., J. Nielsen, A.G. Christiansen (2019): "Job polarization has increased inequality across Western Europe", Economic Council of the Labour Movement (ECLM).

[29] European Commission (2017): LMWD 2017 Report, DG EMPL (link).

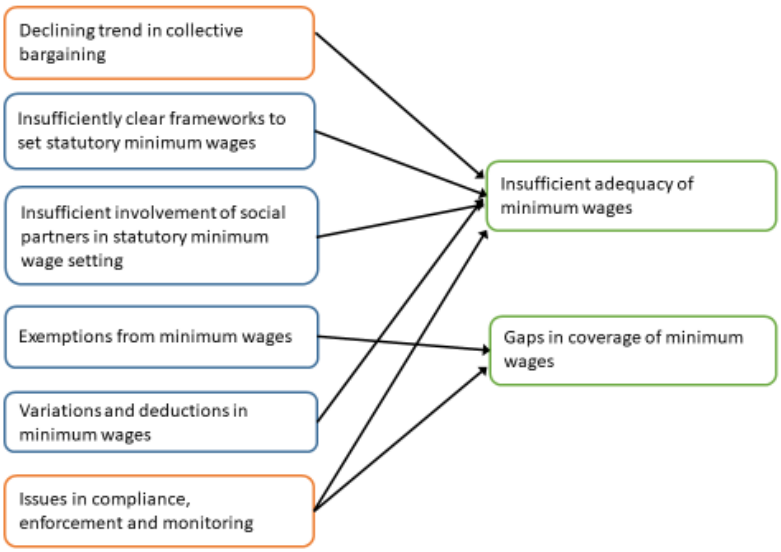
variations and deductions affect adequacy. For this reason, they are depicted separately in Graph 3 even if discussed in the same internal driver (4).

Graph 3: Links between internal drivers and aspects of the problem, by minimum wage setting system

(a) Systems where minimum wage protection is provided by collective agreements



(b) Systems with a statutory national minimum wage



2.4 Internal drivers in Member States where minimum wage protection is provided by collective agreements

2.4.1 Declining trend in collective bargaining

Well-functioning collective bargaining ensures that workers are protected by wages set in collective agreements and leads to higher wage levels. This is in particular the case in Member States where minimum wage protection is provided by collective agreements since, in these countries, collective bargaining directly determines both the coverage and the adequacy of minimum wages.[30] Member States with this type of system display some of the highest wages (see Graph 1 and Graph 2 above) as well as lower wage inequality.[31]

Collective bargaining coverage shows a decreasing trend in many countries in recent years.[32] While this trend was most pronounced in countries with statutory minimum wages, a significant decrease can also be seen in Cyprus where it has fallen from around 65% to around 45% in the last two decades, while small declines can also be seen in Denmark and Sweden.

Some of the countries where coverage has significantly declined have chosen to introduce a statutory minimum wage. This includes Germany in 2015 (where collective bargaining coverage had decreased from 68% in 2000 to 58% in 2014) and Ireland in 2000. In these two Member States, trends in collective bargaining coverage were not significantly affected by the newly introduced statutory minimum wage.[33]

2.4.2 Issues in compliance, enforcement and monitoring

Studies based on survey data have found that non-compliance appears to be a significant phenomenon in many countries, including those countries where minimum wage protection is provided by collective agreements.[34] Nevertheless, data issues limit the possibility of precise estimations.[35] Evidence also suggests that higher wages set in collective agreements may lead to a higher risk of non-compliance, including undeclared work.[36]

[30] See Annex A6.1 for detail on the institutions in countries relying on collective bargaining to set minimum wages.
[31] See Annex A9.1 and, in particular, Graphs A9.1 and A9.2.
[32] For more detail, see Annex A9.1 and in particular Graph A9.3.
[33] See Dingeldey, Irene (2019): Wechselwirkungen zwischen Mindestlohn und Tariflohn: Verschiedene Typen im Branchenvergleich. In: *Arbeit. Zeitschrift für Arbeitsforschung, Arbeitsgestaltung und Arbeitspolitik*, Vol. 28(1), pp. 55-72.; as well as Bellmann, L., Bossler, M., Gerner, H.-D., & Hübler, O. (2018): "Collective bargaining coverage, works councils and the new German minimum wage." *Economic and Industrial Democracy*.
[34] See, in particular, Kampelmann, S, A. Garnero and F. Rycx (2013): "Minimum wages in Europe: does the diversity of systems lead to a diversity of outcomes?", ETUI Report 128, p. 82; Garnero, A. (2018): "The dog that barks doesn't bite: Coverage and compliance of sectoral minimum wages in Italy", IZA Journal of Labor Policy 7 (1).
[35] In particular, in most economic and social survey data, such as SILC, it is hard to disentangle non-compliance from data issues related to measurement error.
[36] European Commission (2007): "Stepping up the fight against undeclared work", COM(2007)628, Brussels; and Kampelmann et al. (op cit.).

Systems relying on collective bargaining differ in terms of the extent to which wages set in collective agreements are enforceable. This appears to be a problem in particular in Cyprus, where collectively agreed wages, including indicative minimum starting salaries by occupation, are not legally enforceable because collective bargaining agreements are not legally binding. In 2019, Cyprus made legally binding, for the first time, collectively agreed wages in the tourism sector applying to selected low-skilled occupations.[37]

2.5 Internal drivers in Member States with a statutory national minimum wage

2.5.1 Declining trend in collective bargaining

Collective bargaining coverage has been on a downward trend in many Member States in recent years. It fell from an estimated EU average of about 66% in 2000 to about 56% in 2018 with particularly strong declines in Central and Eastern Europe.[38] Moreover, in several EU countries, collective bargaining shifted from national, inter-sectoral or industry levels to individual firms. One of the drivers of falling collective bargaining was a sharp decline in trade union membership. This decrease has been particularly sharp in Central and Eastern European countries. The increase of atypical and non-standard work has contributed to union density decline. This partly results from the practical difficulties in organising these workers that are inherent to their status. The shift of economic activity from manufacturing to private sector services is also harming unionisation.

The decline in collective bargaining has created a downward pressure on wages and thereby on minimum wages. In particular, low and decreasing collective bargaining coverage has led to a high share of low-wage earners in a number of countries including Czechia, Estonia, and Latvia, putting pressure on statutory minimum wages. It has also contributed to increasing wage inequality overall, leading to a lagging median wage as compared to the average wage in countries such as Bulgaria, Hungary and Romania. This may also have put pressure on minimum wages.

Collective bargaining coverage affects statutory minimum wages indirectly through its effect on general wage developments:

- **The first step of this relationship is that high collective bargaining coverage is associated with higher wages and a lower share of low-wage workers,** i.e., a higher share of income going to labour (see Graph A9.2 in Annex 9.1) and a lower share of low-wage workers. All Member States with a share of low-wage earners below 10% have a collective bargaining coverage rate above 70% (see

[37] See Annex A6.1 for more detail on the minimum wage setting institutions in countries relying on collective bargaining to set minimum wages.
[38] For more detail, see Annex A9.1 and in particular Graph A9.3.

Graph A9.1 in Annex 9.1). While a number of these Member States rely on collective bargaining to set minimum wages, this group also includes countries with statutory minimum wages, such as Belgium and France. Decreases in collective bargaining coverage have been found to have a negative, although transitory, effect on wage growth.[39]

- **The second step is that general wage developments are important determinants of decisions setting statutory minimum wages.** Wage setting through collective bargaining has an institutionalised impact on statutory minimum wage updates (i.e., linked to the dynamics of wages set in collective agreements) in countries such as Germany and the Netherlands. Accordingly, wage moderation in collective bargaining has been a driver of modest minimum wage increases at various times in these countries.[40] In addition, general wage developments automatically affect minimum wage adjustments in Belgium, France, Luxembourg, and Slovenia, through automatic indexation formulas. In other Member States with statutory minimum wages, minimum wage setting is informed, by law or by custom, by general wage developments.[41] Moreover, the decline in collective bargaining on wage setting therefore leads to increased wage inequality. By strengthening the bargaining power of low-wage workers, collective bargaining supports higher wages at the bottom end of the wage scale and thus contributes to limiting wage inequality.

2.5.2 Insufficiently clear frameworks to set statutory minimum wages

The lack of a clear framework for setting and updating statutory minimum wages may harm minimum wage adequacy. A low frequency of updates and an unclear framework (e.g. the lack of criteria to guide the updates of statutory minimum wages) may result in periods of non-adjustment alternating with large increases in the minimum wage. As a result, statutory minimum wages may not keep pace with developments in prices, wages or productivity for several years and thus does not reach a sufficient level of purchasing power to ensure a decent living. Consequently, clear and stable frameworks for updating minimum wage are associated with more adequate minimum wages.[42]

In many Member States, statutory minimum wage setting is not based on clear and stable criteria.[43] Member States where criteria for minimum wage setting are not defined by law (Bulgaria, Estonia, and Romania) often lack an adequate level of

[39] See European Commission (2018): "Labour market and wage developments in Europe, Annual Review 2018" DG EMPL, Chapter II.1.
[40] See, e.g., European Commission (2018): "Country Report: The Netherlands 2018", page 33; European Commission (2020): "Country Report: Germany 2020", page 39.
[41] For instance, in Czechia, Croatia, Ireland, Greece, Latvia, Malta, Poland and Slovakia the law defines either formulas, variables or targets to update the statutory minimum wage that take into account wages.
[42] See European Commission (2016): LMWD Report 2016, DG EMPL, Chapter II.1 (link).
[43] See Table A9.1 in Annex A9.2.

minimum wages (in particular Estonia and Romania). Moreover, in several Member States, the minimum wage legislation only makes a general reference to the need for minimum wage setting to take into account broad economic conditions[44], or a list of variables or factors (including among others exchange rates, hours worked, tax burden, household expenditure) is defined but without guidance on the use of these variables or on their interaction.[45] Among these countries, the majority do not provide for adequate minimum wage levels (Germany, Ireland, Greece, Croatia, Latvia, Hungary, Poland, and Slovakia).

The regularity and timeliness of statutory minimum wage updates are not always defined by law.[46] In many Member States, an established practice of annual updates exists even though not legislated, while in some Member States the regularity and timeliness of the updates are neither defined in legislation nor established through a regular practice (see Table A9.2 in Annex 9.2). This is the case e.g. for Romania, where the regularity and timeliness of statutory minimum wage updates are not specified and the adequacy of minimum wages remains low. Furthermore, in three Member States (Czechia, Estonia, and Ireland), the annual updates are not defined by law but implemented through an established practice. All three Member States are among the countries with the lowest adequacy of the statutory minimum wages.

Clear targets for minimum wage levels can contribute to ensuring adequacy. However, if targets are set too low (e.g. at 40% of average wage) there is a higher risk that they do not provide for sufficient adequacy. Four Member States (Czechia, Estonia, Lithuania, and Poland) have set targets for minimum wage levels, which range from 40% to 50% of the gross average wage.[47] Particularly in Czechia and in Estonia, where the target is set at 40% of the average wage, the adequacy of minimum wage remains among the lowest in the EU.

2.5.3 Insufficient involvement of social partners in statutory minimum wage setting

The involvement of social partners in setting and updating statutory minimum wages makes the minimum wage setting more informed and inclusive. Social partner consultation can enhance the capacity of minimum wage setting systems to ensure adequacy while preserving employment and competitiveness. It can also reduce uncertainty for employees and firms.

[44] These Member States are Germany, Ireland, Greece, Spain, Croatia, Lithuania, Hungary, Poland, Portugal and Slovakia.
[45] These Member States are Germany, Czechia, Croatia, Ireland, Greece, Latvia, Lithuania, Malta, Netherlands, Poland, and Slovakia.
[46] These Member States are Germany, Greece, France, Croatia, Latvia, Lithuania, Malta, Netherlands, Poland, Slovenia and Slovakia.
[47] In Czechia and Estonia, the target is set at 40% of the average wage, in Lithuania between 45% and 50% and in Poland at 50% of the average wage. For more detail on targets and other mechanisms in place, see Annex A9.2. For a broad survey of minimum wage setting in statutory systems, see Annex A6.2.

However, the involvement of social partners in statutory minimum wage setting is limited. In several Member States [48] and considerable differences exist in their role in the decision-making process of statutory minimum wages across the Member States. In a number of Member States (Bulgaria, Spain, Croatia, Latvia, Hungary, Portugal, and Romania), although an institutionalised bilateral/tripartite consultation process is defined by law, this consultation is non-binding and governments can change the minimum wage levels unilaterally. The majority of these countries (Croatia, Latvia, Hungary and Romania) does not provide for adequate minimum wage levels. The adequacy of minimum wages is also very low in Member States where an institutionalised tripartite or bipartite setting exists, but is not defined by law (Estonia, Lithuania, Poland, and Slovakia). In some Member States, social partners often play only an advisory role in systems where the minimum wage setting is led by expert bodies. This is the case for Greece and Ireland, where the issued non-binding recommendations do not help to achieve adequate minimum wage levels, as the adequacy of minimum wages in both countries remains low. The role of social partners in the decision making process is also variable in Member States with automatic indexation.[49] In Malta, for instance, the automatic indexation is complemented by a formal obligation to consult social partners, which leads to non-binding recommendations, and the adequacy of minimum wages in the country is among the lowest in the Union. In other Member States, the involvement of social partners is not institutionalised at all.[50] Particularly in Czechia, where the adequacy of minimum wages is among the lowest in the EU, this could be a contributing factor. In a number of Member States, there are challenges related to the involvement of social partners in the policy process in general.[51]

2.5.4 Variations, deductions, and exemptions

Reduced rates of statutory minimum wages, so-called variations, applying to specific groups reduce the adequacy of statutory minimum wages. They can exacerbate existing inequalities for vulnerable groups of workers in some cases, e.g. if lower minimum wages are applied across the board to young workers, in specific sectors in which for instance women or migrant workers are over-represented, or if they are not limited in time leading to systemic underpayment of work. At the same time, they may be beneficial for facilitating access to the labour market of vulnerable groups if they are non-discriminatory, proportionate and limited in time. They can have a positive effect on employment if they aim at integrating young workers in the labour market, providing training to apprentices or promoting the employment of workers with lower productivity.

[48] This is the case in Bulgaria, Czechia, Spain, Croatia, Hungary, Latvia, Malta, Poland, Portugal, Slovenia and Romania. The situation has deteriorated in the case of Poland and Hungary in the context of the measures taken during the Covid-19 pandemic. For more detail, see Annex 9.

[49] While in four of these countries (Belgium, France, Malta and Slovenia), the law specifies a formal obligation to consult the social partners on such discretionary changes, in France, the social partners have only an advisory role. In Luxembourg and the Netherlands, there is no legislative clause for social partner consultation.

[50] E.g. in Czechia.

[51] Such challenges have been identified in the framework of the European Semester e.g. Hungary, Poland and Romania received in 2019 and 2020 Country-Specific Recommendations calling for the need to strengthen social dialogue.

Variations in statutory minimum wages exist in many Member States.[52] In several Member States,[53] there are purely age-based variations while in some others they are either education and/or experience-based.[54] The available data suggest that the share of workers affected by youth variations is very small, except in the Netherlands and, to a lesser extent, Luxembourg. In particular, about 8% of workers earn less than 95% of the regular minimum wage in the Netherlands; about two-thirds of them are younger than 20 years old and almost all younger than 30. About 2% of workers earn less than 95% of the regular minimum wage in Luxembourg; 60% is younger than 30.[55] A number of other kinds of variations exist such as for seasonal and domestic workers and for workers with disabilities.

In some cases, the effect of minimum wage regulation can be weakened by allowing deductions from the minimum wage. For instance, deducting the value of the equipment needed to perform the work from the minimum wage, or the cost of travel, board or lodging and accommodation, reduces the actual financial remuneration of workers. Deductions from wages exist in all the Member States with statutory minimum wages. In many cases deductions are provided by law (e.g. in the case of taxes and social security contributions). In other cases they can result from advance payments, guarantees, over-payments, participation in strikes, or in case food is provided, while they can also be agreed with the employee (e.g., to deduct loan instalment payments). In some other cases, deductions can be made to compensate, among others, for damages, missed working hours, gross misconduct or fines. In some Member States (Estonia, France, Latvia, Lithuania, the Netherlands and Poland), specific provisions exist which protect minimum wage earners. For example, in Estonia, there is a provision that no deductions can be made for minimum wage earners (with some very few exceptions defined by law where 20% can be deducted), while in the Netherlands, the paid salary cannot fall below the minimum wage, except in the case of reductions due to advance payments. In Lithuania, in the case of a minimum wage workers, deductions can be made up to 20% of wages for the compensation of damage (in some cases 50%) and in Poland, 75% of the salary is free from deductions (or 90% after reductions due to penalties). In France, the amount that can be deducted increases progressively with increased salary, and in the lowest tranche, a maximum of one twentieth of the salary can be deducted. In Latvia, in any case of compensation for damages, the resulting salary cannot fall below the minimum wage plus the state social security benefit for each dependent minor child. More information on deductions per Member State is available in Table A9.4 in Annex 9.

[52] These Member States are Belgium, Greece, Spain, France, Ireland, Hungary, Croatia, Luxembourg, Malta, Netherlands and Portugal.
[53] These countries are Belgium, Ireland, Luxembourg, Malta and Netherlands.
[54] These countries are Belgium, Greece, Spain, France and Portugal.
[55] Calculations are based on the EU Structure of Earnings Survey, from 2014 (latest available wave). The survey does not include firms with less than 10 employees.

Besides variations and deductions, several Member States with statutory minimum wages have exemptions in their scope of application.[56] In most cases, these are related either to up- or re-skilling (e.g. for trainees) or to labour market integration. In other cases, specific groups of workers are covered by separate provisions (e.g. public service). Their use leads to gaps in minimum wage coverage.

2.5.5 Issues in compliance, enforcement and monitoring

Gaps in coverage and insufficient adequacy may also emerge if existing rules are not complied with. Studies based on survey data have found that non-compliance appears to be a significant phenomenon in almost all countries,[57] although data issues limit the possibility of precise estimations.[58] In Member States with statutory minimum wages, some of the evidence is provided by the institutions in charge of enforcing minimum wage rules, such as labour inspectorates or customs offices. Compliance may also be an issue in some of the Member States where minimum wage protection is provided by collective agreements. For instance, it has been estimated that, in Italy, more than 10% of workers are paid below the wage set by their reference collective agreement with an average shortfall of 20-23% (see Annex A9.5 5) Evidence also suggests that young workers, women and agricultural workers are more likely to be paid less than the minimum wage floor in some Member States.[59] Increasing minimum wage levels may lead to a higher risk of non-compliance, including undeclared work.[60]

The lack of compliance can lead to unfair competition, as the reduced labour costs of non-compliant businesses can distort competition. This risk exists also in the context of public procurement procedures where non-compliant bidders could benefit from lower wage costs. Workers' organisations have expressed their concerns that public contracts may be awarded to companies that do not comply with the applicable collective agreements and legal frameworks.[61]

The lack of reliable monitoring and data collection mechanisms affects the evaluation of trends in the adequacy and coverage of minimum wages. In Member States with statutory minimum wages, data are not always available on the share of non-covered workers or the share of workers affected by specific variations in or deductions from minimum wages. In the Member States where minimum wage protection is

[56] These countries are Belgium, Czechia, Germany, Estonia, Spain, France, Ireland, Croatia, Lithuania, Latvia, Netherlands and Poland.
[57] See, in particular, Kampelmann, S, A. Garnero and F. Rycx (2013): "Minimum wages in Europe: does the diversity of systems lead to a diversity of outcomes?", ETUI Report 128, p. 82; Garnero, A. (2018): "The dog that barks doesn't bite: Coverage and compliance of sectoral minimum wages in Italy", IZA Journal of Labor Policy 7 (1).
[58] In particular, in most economic and social survey data, such as SILC, it is hard to disentangle non-compliance from data issues related to measurement error.
[59] Eurofound (2019): "Minimum wages in 2019: Annual review" and Goraus-Tańska and Lewandowski (2018): Minimum wage violations in central and eastern Europe, International Labour Review, Vol 158.
[60] European Commission (2007): "Stepping up the fight against undeclared work", COM(2007)628, Brussels; and Kampelmann et al. (op cit.).
[61] See Annex 2 for a summary of the responses submitted to the consultation of social partners.

provided by collective agreements, the incomplete information on collective bargaining coverage (see Annex A4.6) and the level of wages set in collective agreements makes it difficult to appropriately monitor the situation of low-wage workers. Moreover, data is scarce on the level and adequacy of wages for workers not protected collective agreements.

2.6 Why is this a problem? What are the consequences?

2.6.1 For workers

Adequate minimum wages improve the socio-economic situation of the families of low-wage earners, and contribute to reducing wage inequality and in-work poverty.[62] Gaps in adequacy and coverage of minimum wages hamper upward convergence in working and social conditions between EU Member States. Driven by a number of economic factors, but also affected by minimum wages, in-work poverty increased from 8.3% in 2007 to 9.4% in 2018 in the EU.[63] At the Member State level, in-work poverty has been on the rise in all but seven EU Member States (i.e. Croatia,[64] Finland, Greece, Ireland, Latvia, Poland, and Romania) showing that, increasingly, work does not always protect against poverty.

Inadequate minimum wages may contribute to the gender pay gap. Given their over-representation among minimum wage workers,[65] women are more affected by inadequate minimum wage policies than men. Moreover, since national minimum wage policies tend to compress the bottom of the wage distribution, where women are over-represented, inadequate minimum wage policy could also lead to a higher gender pay gap.[66]

Major gaps in minimum wage adequacy or coverage may lead to labour market segmentation. Labour market segmentation is a concern especially if low-wage workers are not able to move quickly to higher-paying jobs (i.e. if earnings mobility is low) or if the incidence of informal employment, including due to the lack of enforcement of regulations, is high.

In addition, a low adequacy of minimum wages means that work does not pay, as compared to being unemployed or inactive. In this case, people out of work will not have sufficient incentives to take up work at the minimum wage. Work incentives are

[62] For a survey of these effects, see Annex A8.1.
[63] See Graph A8.3 in Annex A8.1. The average refers to the 27 Member States of the EU between 2007 and 2013. In the average of the current 27 Member States of the EU as of 2020, in-work poverty increased from 8.5% in 2010 (earliest available data) to 9.3% in 2018.
[64] For Croatia, the comparison is made between 2010 and 2018 for reasons of data availability.
[65] The probability of women to be minimum wage earners is 14% against 8% for men (see Graph A7.2 in Annex 7.1). Annex 7.1 also shows detail about the share of women among minimum wage earners by Member States.
[66] A recent study on the introduction of the minimum wage in Ireland and the UK found a large reduction of the gender wage gap at the bottom of the distribution in Ireland while there was hardly any change in the UK. A counter-factual simulation suggests that these contrasted results between the two countries may be due to the degree of non-compliance with the UK national minimum wage legislation. See: Bargain, O., K. Doorley and P. van Kerm (2018), "Minimum wages and gender gap in pay: New evidence for the UK and Ireland", IZA Discussion Paper Series.

also determined by the tax-benefit system, which in some countries reduces incentives to work for low-wage earners and second earners.[67] In particular, adequate minimum wages and tax incentives for low-wage earners are complementary policies to maintain high employment and support the income of low-wage workers.[68]

2.6.2 For businesses, economy and society

Inadequate minimum wages may contribute to unfair competition in the labour market, which is a key concern for SMEs.[69] In addition, inadequate minimum wages may make recruitment more difficult. They reduce the pool of workers for recruitment due to reduced work incentives. They increase the turnover of staff and reduce staff engagement.[70] These impacts may affect SMEs more as they employ a majority of workers at the minimum wage level.

Unpredictable minimum wage developments can have negative consequences for firms, especially SMEs, and for the economy as a whole. Under systems characterised by an insufficient involvement of social partners and an insufficiently clear framework to set statutory minimum wages, minimum wage setting is not based on a full set of information, reflecting all relevant economic and sectoral conditions, nor sufficiently articulated with collective bargaining processes. This results in less frequent but larger increases in the minimum wage with more significant effects on the decisions of firms. Evidence suggests that in such systems, minimum wage increases are also more correlated to the political cycle.[71] Such developments may have a negative effect on the business environment for firms and thus, in the long run, for investment, productivity, and growth.

Low wages may trigger labour mobility flows between Member States, which raise concerns for sending and receiving countries. The free movement of workers is one of the founding principles of the EU. Labour mobility can be instrumental in promoting labour market adjustment and support the deepening of the single market. Large wage

[67] For more information on the tax burden of minimum wages, see Graph A8.5 in Annex A8.2.

[68] "A binding minimum wage enhances the effectiveness of transfers to low-skilled workers as it prevents low-skilled wages from falling through incidence effects." See: Lee, D. and E. Saez (2012): "Optimal minimum wage policy in competitive labor markets", *Journal of Public Economics* 96, pp 739-749.

[69] "A well-adapted minimum wage level contributes to strengthen internal demand and economic growth. It also reduces poverty and social exclusion as well as prevents unfair competition and social dumping on the labour market, a key concern for SMEs." SMEUnited (2020): Response to first phase consultation of social partners under Art 154 TFEU on a possible action addressing the challenges related to fair minimum wages. See Annex 2 for a summary of consultations.

[70] For instance, past research on increased minimum wages for young workers has suggested that workers affected by minimum wage increases have an increased probability to stay at their jobs. This effect was counterbalanced by a reduced rate of accessions to new jobs by affected workers. See: Portugal P. and A. R. Cardoso (2006): "Disentangling the Minimum Wage Puzzle: An Analysis of Worker Accessions and Separations", *Journal of the European Economic Association*, Vol. 4(5), pp. 988-1013. More generally, theories of "efficiency wages" suggest that engagement and productivity of individual workers can increase if they are paid more than the market-clearing wage. As another channel for increased individual productivity, it has been suggested that firms may invest more in their workers if they have to pay an increased minimum wage.

[71] European Commission (2016): LMWD 2016 Report, DG EMPL, Chapter II.1.

differentials (between regions and between countries) can trigger outward mobility from poorer regions,[72] particularly among low paid workers and the young, exacerbating ongoing demographic trends of ageing and population decline, in certain regions. Minimum wages can counteract these trends by supporting the wages of young workers in low-income regions. At the same time, outward labour mobility may tighten local labour markets, increase the bargaining power of local workers and raise average wages in the short term.[73] But such re-equilibration is less effective among low-wage earners.

2.7 How will the problem evolve?

It is expected that more workers will need the protection of adequate minimum wages in the future. In particular, the situation of low-wage workers may continue deteriorating, and in-work poverty can be expected to continue increasing. This is because the main external drivers of these developments (including technological change leading to job polarisation, global low wage competition, shifts in the economy towards services putting pressure on collective bargaining, and increasing the weight of non-standard work) are secular trends, which are expected to continue.

Without policy action, these trends may also be exacerbated by the strong impact of the Covid-19 crisis. Social distancing has strongly hit sectors where low-pay workers are disproportionally represented. The most affected sectors are services including transports, tourism and hospitality. In the second quarter of 2020, there were 6 million less employed in the EU compared to the last quarter of 2019; about half of this was due to job destruction in wholesale and retail trade, transport, accommodation and food services. Activity in these sectors is likely to stay on hold for a while, as people adopt voluntary social distancing to minimise the risks of infections or new waves of contagion lead public authorities to introduce selective restrictive measures. These changes have redistributive effects as not all workers are equally adaptable or exposed to them. Workers that were in a weak position before the pandemic hold occupations that are vulnerable to social distancing. Real-time survey data show that those in the top earnings quartile were on average 50% more likely to work from home in April than those in the bottom quartile.[74] This leads to downward pressure on wages, notably for low wage earners, and may put further pressure on collective bargaining.

At the same time, the crisis has brought to the fore the category of 'essential workers', in sectors such as cleaning, retail, distribution, logistics, and delivery, health and long-term care and residential care. In these sectors, the share of low-wage

[72] See, e.g. European Commission (2015): LMWD report, Chapter II.1.
[73] On the possible negative effects of structurally large mobility flows on sending countries, see, e.g., Center for Policy Studies (CEPS), 2019: "EU mobile workers. A challenge to public finances?", Contribution prepared at the request of the Romanian Presidency of the Council of the European Union, presented at the informal ECOFIN meeting in Bucharest, 5-6 April, 2019.
[74] OECD (2020): Employment Outlook 2020.

workers is high.[75] There is an increasing public recognition of the role of such workers, while their remuneration levels continue to stagnate. Workers in health and social services are more likely to earn the minimum wage than other workers in the public sector.[76] Moreover, evidence suggests that lower-skilled health and social care assistants earn considerably less than the national average wage in their country.[77] With unemployment expected to increase, the bargaining power of low-paid workers is likely to decrease in the near future.

Given the sizeable and increasing share of low-wage workers, protection by adequate minimum wages becomes even more important. While reforms in minimum wage setting systems implemented by Member States go in the right direction, progress has been uneven. As a result, many workers in the EU are still not adequately protected by minimum wages. It is likely that the reform momentum in the minimum wage setting systems will not continue, notably in the context of the expected deterioration of labour market conditions caused by the Covid-19 pandemic. This reinforces the case for EU intervention at the present point in time

3 WHY SHOULD THE EU ACT?

3.1 Legal basis

Article 153 is the appropriate legal basis for an EU initiative on fair minimum wages. Insofar as wages, including minimum wages, are a key component of working conditions, the initiative could be based on Article 153 (1) (b) TFEU on 'working conditions'.[78]

Article 153(5) TFEU contains limitations to the EU competence. This paragraph establishes that *'the provisions of this Article shall not apply to pay'*. Article 153(5) has been interpreted by the Court of Justice of the European Union (CJEU) in such a way that the exclusion on 'pay' "*must be construed as covering measures - such as the equivalence of all or some of the constituent parts of pay and/or the level of pay in the Member States, or the setting of a minimum guaranteed wage - that amount to direct interference by EU law in the determination of pay within the European Union". "It cannot, however, be extended to any question involving any sort of link with pay; otherwise some of the areas referred to in Article 153(1) TFEU would be deprived of*

[75] In particular, 15% of agricultural workers, and up to 20% in some agricultural jobs, are minimum wage earners; the figure is 13% in retail and 25% of cleaners and helpers. See Annex A7.2 and Eurofound (2020), Minimum wages in 2020: Annual review, Publications Office of the European Union, Luxembourg.
[76] See Annex A7.2 for more detail.
[77] Müller, T. (2018) "She works hard for the money; Tackling low pay in sectors dominated by women, Evidence from health and social care", European Public Service Union. The paper also shows that the higher the proportion of women in the sector, the lower the average relative income – and this applies also to skilled nurses and midwives as well as lower-skilled assistant professions.
[78] Art 153.1 TFEU states that: "*1. With a view to achieving the objectives of Article 151, the Union shall support and complement the activities of the Member States in the following fields: (...) (b) working conditions; (...)*".

much of their substance."[79] In line with this interpretation, recent initiatives using Article 153 TFEU as legal basis (e.g. the 2019 Directive on work-life balance for parents and carers and the 2019 Directive on transparent and predictable working conditions) already touch indirectly on different aspects of pay, whereby remuneration is regarded as part of working conditions, as referred to in Article 153 (1) (b).[80]

It follows that in view of Article 153(5) TFEU and constant case law of the ECJ any EU action in the field of minimum wages shall not seek to harmonise the level of minimum wages across the EU, nor would it seek to establish a uniform mechanism for setting minimum wages.[81] Action at EU level could thus be to set up a framework to ensure that national minimum wage setting systems allow workers to access adequate minimum wage protection, either in the form of a statutory minimum wage or of wages set in collective agreements. This approach would not interfere with Member States' and social partners' competence to determine the detailed modalities of their minimum wage setting frameworks, and in particular the level of their minimum wages, in line with the Treaty.

Therefore, the diversity of minimum wage setting systems in Europe would be preserved. Minimum wages would continue to be set either through collective agreements or through legal provisions, in full respect of national competencies and social partners' contractual freedom. The initiative would allow Member States to implement the measures, notably those related to collective bargaining and national frameworks for statutory minimum wages, taking into account their national economic circumstances and the specificities of their minimum wage setting systems. Limits to the legal possibilities of EU action also imply that EU action would not make it binding for Member States that rely on collective bargaining to introduce statutory minimum wages.

In light of the limitations presented above, EU action would thus not go beyond what is necessary to achieve the policy objectives, so that the principle of proportionality is respected considering the size and nature of the identified problems.

3.2 Subsidiarity: Necessity and added value of EU action

The majority of Member States are affected by the problem of insufficient adequacy and/or coverage of minimum wages. These challenges affect both types of minimum wage setting systems (see sections 2.1.1 and 2.1.2):

- In Member States where minimum wage protection is provided by collective agreements, more than 10% of workers are excluded from the protection of wages set in collective agreements in four countries (Italy, Denmark, Sweden, Finland),

[79] See Case C-268/06, Impact, point 124-125; Case C-307/05, Del Cerro Alonso, point 41.
[80] E.g. for the purpose of Directive 1999/70/EC on fixed-term work, of Directive 97/81 on part-time work or of Directive 2008/104/EC on temporary agency work.
[81] See e.g. Case C-268/06, Impact, point 123-124.

reaching 55% in the case of Cyprus, although there is limited information about how many of these workers are earning low wages. Moreover, wages set in collective agreements in Cyprus and Italy do not seem to be sufficiently adequate.

- In Member States with a statutory national minimum wage, some workers are not protected by minimum wages due to exemptions in twelve Member States (Belgium, Czechia, Germany, Estonia, Ireland, Spain, France, Croatia, Latvia, Lithuania, the Netherlands, and Poland). Furthermore, statutory minimum wages are too low vis-à-vis other wages[82] and/or to provide a decent living[83] in fourteen Member States (Bulgaria, Czechia, Estonia, Greece, Germany, Croatia, Hungary, Ireland, Latvia, Luxembourg, Malta, the Netherlands, Romania, Slovenia).

Action at national level has proven insufficient to address the problem. While over the last years, several Member States have taken steps towards improving their minimum wage systems, national action has not been sufficient to address the identified problem. Reforms at national level have not been comprehensive enough and implementation has often lagged.

Existing EU instruments, most notably the European Semester, have not been sufficient to address the existing shortcomings in national minimum wage setting systems. Minimum wage policies have been subject to multilateral surveillance within the European Semester, and the EU has issued policy guidance to selected Member States. In the last decade, thirteen Member States have received country-specific recommendations (CSRs) on wages, and ten of them specifically on minimum wages (see Annex A12.11). For instance, Bulgaria and Romania have repeatedly received CSRs during the period 2014-19 calling for more transparent minimum wage setting mechanisms based on objective criteria for updating minimum wages (such as job creation and competitiveness). However, minimum wage setting frameworks in both countries remain insufficiently clear and social partners are not sufficiently involved. As a result, recent increases in minimum wages in these countries seem to have negatively affected the business environment in these countries.[84] Continuing to approach the problem only in a country specific manner is not proportionate to the extent of the problems identified in the majority of Member States.

Without policy action at EU level, more countries are likely to be affected by the problem, which would endanger the level playing field in the Single Market. While

[82] Gross minimum wage below 50% of the gross median wage or below 40% of the gross average wage.
[83] Net income of single minimum wage earners working full-time below the poverty line, which is set in European social statistics at 60 % of the national median equivalised disposable income after social transfers.
[84] Only 22% of all CSRs in the period 2011-2019 have been fully, or substantially, implemented by Member States, while no or limited progress was recorded for 32% of them. Cf. 2020 Commission Communication on European Semester: Country-specific recommendations, COM(2020) 500 final.

the effect of most internal drivers is expected to remain steady[85], the secular decline of collective bargaining is likely to reinforce the magnitude of the identified problem. In countries where minimum wage protection is provided by collective agreements, both the adequacy of wages set in collective agreements and the share of protected workers will be affected. In Member States with statutory minimum wages, minimum wage adequacy will also be impacted given the strong effect that collective bargaining has on it, as explained above (see section 2.5.1). Without concerted action at EU level, individual countries may be little inclined to improve their minimum wage settings because of the perception that this could negatively affect their external cost competitiveness. This creates challenges for maintaining a level playing field in the Single Market as competition risks being more based on lowering social standards, rather than on innovation and productivity.

An EU initiative would be more effective in strengthening minimum wage setting systems than other instruments. An EU framework would set clearer expectations, ensure that progress is not partial or uneven, and reinforce trust among Member States and social partners by increasing transparency. This would help provide the necessary momentum for reinforcing collective bargaining and for national reforms of minimum wage setting mechanisms. EU action can provide increased transparency, providing comparative data on the coverage and adequacy of minimum wages and the underlying developments of wages and collective bargaining in the Member States. This could support the development of national collective bargaining frameworks, strengthening the social dimension of the Single Market.

EU action would also ensure a level playing field in the Single Market by helping to address large differences in the coverage and adequacy of minimum wages that are not justified by underlying economic conditions.

EU action on fair minimum wages would improve the fairness of the EU labour market, promote economic and social progress and cohesion, help reduce the gender pay gap, and contribute to upward social convergence.[86] These objectives are clearly set out in the EU Treaties and reflected in the European Pillar of Social Rights. By supporting the process of upward convergence in the field of minimum wages, and taking into account economic conditions, EU action on minimum wages would contribute to paving the way for better working conditions in the Union. Such a framework would send a clear signal to citizens about the role played by the EU for protecting their working conditions and living standards, against the background of current and future challenges, while demonstrating awareness of the firms' needs,

[85] It is expected that minimum wage setting systems in Member States will remain overall stable without action at EU level.

[86] The role of an EU initiative on the minimum wage in ensuring upward convergence was supported by Member States (EMCO and SPC) during the targeted consultation (see Annex A2.3 details).

notably those of SMEs. EU action would be in line with international instruments, notably ILO conventions and the European Social Charter. The value added of the EU action could be to build on those standards and to make them more operational and more targeted to EU labour markets. It can thus reinforce the credibility of Union action to protect labour standards in external relations, notably in bilateral trade agreements.

4 OBJECTIVES: WHAT IS TO BE ACHIEVED?

4.1 General objective

The initiative aims at improving working conditions by ensuring that all workers in the Union have access to adequate minimum wage protection either in the form of statutory minimum wages or wages set in collective agreements, allowing for a decent living wherever they work, as laid down by principle 6 of the European Pillar of Social Rights and the Treaty. This objective is to be achieved while safeguarding access to employment and taking into account the effects on job creation and competitiveness, including for SMEs. The initiative fully respects national competencies and social partners' contractual freedom.

4.2 Specific objectives

In order to reach this general objective, the specific objectives of the EU initiative would be to improve the adequacy and to increase the coverage of minimum wages. These objectives are relevant to both types of wage setting systems. As a result of this initiative, it would be considered a success if:

- Member States with statutory minimum wages would ensure that the minimum wage is set and maintained at an adequate level (as guided by reference values commonly used at the international level).

- In all Member States the collective bargaining coverage rate would be at a level of at least 70%.

The initiative is addressed to all Member States. It applies to all workers in all sectors provided that they have an employment contract or employment relationship as defined by the law, collective agreements or practice in force in each Member State, with consideration to the criteria established by the Court of Justice of the European Union.[87]

[87] If they fulfil those criteria, domestic workers, on-demand workers, intermittent workers, voucher based-workers, bogus self-employed, platform workers, trainees, apprentices and workers in the public sector should fall within the scope of the initiative.

5 WHAT ARE THE POSSIBLE POLICY MEASURES?

5.1 The baseline scenario

Under the baseline scenario, external drivers like globalisation and technological developments are expected to persist and will continue to rapidly change the structure of economies and labour markets. While taking into account the changes in the recent past (see also Annex 10) no further changes by Member States are expected to improve the adequacy of their minimum wages or to improve the framework setting them (for the status quo, see Annex A6.2 and Annex 9).

Member States that ratified international labour standards, namely the ILO's Minimum Wage Fixing Convention (C. 131)[88] and the Collective Bargaining Convention (C.154)[89] are bound by them, while no new ratifications are expected. All Member States are expected to report on minimum wages to the Council of Europe.

At the EU level, minimum wage policies will be subject to multilateral surveillance within the European Semester and monitoring through a benchmarking framework.[90] The European Semester, the regular cycle of economic policy coordination in the EU, may ultimately lead to the adoption of Country-Specific Recommendations (CSR) with suggestions and guidance for national minimum wage setting in selected countries.

Member States already have to make information on minimum wages publicly available on a single national website under the Enforcement Directive concerning the posting of workers.[91] Information on the collective agreements in force is also available on these websites. The single national official websites of all Member States are accessible from the Your Europe website.[92]

The baseline scenario assumes stability of institutions and policies in Member States regarding the coverage of minimum wages. In Member States with statutory minimum wages, no changes are expected to exemptions or enforcement. In turn, while collective bargaining coverage followed a downward trend on average in the EU in the last decades, this trend was not observed in Member States without a statutory minimum wage (see Annex 9.1). The assumption of continued stability of collective bargaining coverage in these countries is therefore reasonable.[93]

[88] Ratified by Bulgaria, France, Latvia, Lithuania, Malta, Netherlands, Portugal, Romania, Slovenia and Spain.
[89] Ratified by Belgium, Cyprus, Czechia, Finland, Greece, Hungary, Latvia, Lithuania, Netherlands, Romania, Slovakia, Slovenia, Spain and Sweden.
[90] For more information see Annex A12.11.
[91] Directive 2014/67/EU, Art 5 (2)
[92] https://europa.eu/youreurope/citizens/work/work-abroad/posted-workers/index_en.htm%23national-websites
[93] As part of the assumption of stability of institutions, the analysis also does not pre-judge any discussions in Member States about institutional reforms. For instance, in Cyprus, the government declared its intention to introduce a statutory national minimum wage when the labour market reaches conditions of full employment (unemployment rate below 5%). In Italy, there has been a political debate about the possibility of introducing a statutory minimum wage, among other possible reforms.

5.2 Description of the policy measures

The specific objectives can be achieved by a combination of measures aimed at addressing the internal drivers identified in section 2.3. In this regard, the following five areas of intervention were identified:

(1) **Collective bargaining on wage setting**: A well-functioning system can ensure that all workers, particularly the most vulnerable ones, are protected by adequate wages, both in the systems where minimum wages are only determined by collective agreements and in those where they are set by law. Well-functioning collective bargaining implies that all types of employers and employees are duly represented and ensures that wage conditions are consistent with workers' and employers' needs and are responsive to changing economic circumstances. By shaping general wage developments, collective bargaining also influences developments in statutory minimum wages. The structure and functioning of collective bargaining thus play a key role for achieving fair minimum wages, whether it is the sole wage setting system existing in the country or whether it is combined with statutory national minimum wage.

(2) **Clear national frameworks to set and update statutory minimum wages**: The use of clear and stable criteria referring to adequacy goals and reflecting socioeconomic conditions in a country as well as guiding the adjustment of minimum wages at regular intervals allows workers to rely steadily on an adequate income from work. A clear and stable framework to set statutory minimum wages also contributes to a stable economic environment, which in turn is conducive to good working conditions. At the same time, minimum wage setting systems must provide sufficient flexibility to account for changing socio-economic conditions and adjustment needs.

(3) **Involvement of social partners in statutory minimum wage setting systems**: A timely and effective involvement of the social partners in statutory minimum wage setting and updating is key to allow minimum wage developments to achieve adequacy goals, keep up with price, wage and productivity developments and account for socio-economic developments. Taking into account their views, guided by the above-mentioned criteria, can have positive effects on the rights and entitlements of employees, and on the investment decisions of firms. An effective involvement of social partners in minimum wage setting also allows for an informed and inclusive decision-making process.

(4) **Variations, exemptions and deductions from statutory minimum wages**: In many Member States, reduced minimum wage rates apply to specific groups of workers, e.g. in the case of sub-minimum wages for youth. Moreover, there is a large variety of deductions applied to wages that can reduce the remuneration paid to workers to a level below the statutory minimum wage. Variations and

deductions are clear limitations to minimum wage adequacy. Finally, statutory minimum wages have exemptions in their scope of application that exclude some groups of workers from the protection of minimum wages, although in most cases they are either related to up- or re-skilling or to labour market integration.

(5) **Enforcement and monitoring:** Well-established procedures to ensure proper implementation of minimum wage rules and frameworks are key to ensuring an effective protection of concerned workers on the ground. This is an important component of the strengthening of minimum wage systems as, in some cases, increasing minimum wage levels may lead to a higher risk of non-compliance, including undeclared work. Reliable EU monitoring and data collection contributes to the transparency of the national systems.

However, not all areas of intervention and the relevant policy measures thereof apply to both Member States where minimum wage protection is provided by collective agreements and those with statutory national minimum wages. This is because the way each system is affected by internal drivers differs across the two systems (see section 2.3). Moreover, differences also result from the Treaty limitations regarding the contractual freedom of social partners. In particular:

- In **countries relying exclusively, or in most sectors, on collective bargaining to set wages**, the specific objectives can be achieved through a combination of measures in two areas: (1) Collective bargaining on wage setting and (5) Enforcement and monitoring.

- In **countries with national statutory minimum wages**, the specific objectives can be achieved through a combination of measures in five areas: (1) Collective bargaining on wage setting, (2) Clear national frameworks to set and update minimum wages, (3) Involvement of social partners in statutory minimum wage setting systems, (4) Variations, exemptions and deductions from minimum wages and (5) Enforcement and monitoring.

The following sections discuss the policy measures considered to address the root causes of the problem under each of these five areas of intervention. Table 1 presents a summary of the measures considered for this initiative per minimum wage setting system. Measures considered but not retained are discussed in Section 5.5. In Section 5.6 policy packages are built from the individual measures.

Table 1: Summary overview of measures considered for the initiative

		Member States relying on collective bargaining	Member States with national statutory minimum wages
Area 1: Collective bargaining on wage setting	**Measure 1.1**	Capacity building for social partners and encouraging negotiations on wages.	Capacity building for social partners and encouraging negotiations on wages.
	Measure 1.2	Administrative extensions of collective agreements, when agreed with social partners.	Administrative extensions of collective agreements, when agreed with social partners.
	Measure 1.3	Member States with collective bargaining coverage below 70% to provide for a regulatory framework or enabling conditions and to establish an action plan to promote collective bargaining.	Member States with collective bargaining coverage below 70% to provide for a regulatory framework or enabling conditions and to establish an action plan to promote collective bargaining.
Area 2: Clear national frameworks to set and update statutory minimum wages	**Measure 2.1**	N.A	Clear and stable criteria to guide minimum wage setting and its regular updating, defined in national legislation, and establishment of consultative bodies to advice authorities.
	Measure 2.2	N.A	Automatic indexation mechanisms for statutory minimum wage updates.
	Measure 2.3	N.A	Indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.
	Measure 2.4	N.A	Statutory minimum wages to follow a national measure of decent living standards (reference income), developed in consultation with social partners.
Area 3: Involvement of social partners in statutory minimum wage setting	**Measure 3.1**	N.A	Ensuring the timely and effective involvement of social partners in minimum wage setting and updating.
	Measure 3.2	N.A	Setting up a bipartite or tripartite body for social partners' consultation with decision-making power.
Area 4: Variations, exemptions and deductions	**Measure 4.1**	N.A	Limited and justified use of variations in and deductions from statutory minimum wages.
	Measure 4.2	N.A	Banning variations, exemptions and deductions from statutory minimum wages.
Area 5: Enforcement and Monitoring	**Measure 5.1**	Strengthening the enforcement of wage clauses in collective agreements.	Strengthening the enforcement of statutory minimum wages and wage clauses in collective agreements.
	Measure 5.2	Ensuring compliance in public procurement with wages set by collective agreements.	Ensuring compliance in public procurement with wages set by collective agreements and with statutory minimum wages.
	Measure 5.3	Enhancing monitoring and data collection mechanism for wages set in collective agreements.	Enhancing monitoring and data collection mechanism on statutory minimum wages and on wages set in collective agreements.

5.3 Measures affecting Member States relying exclusively on collective bargaining

5.3.1 Collective bargaining in wage setting

This section presents the measures considered for Member States countries where minimum wage protection is provided by collective agreements. Three measures were considered which are not mutually exclusive.

The need to strengthen collective bargaining, especially at the sectoral and cross-sectoral level, was emphasised by the European workers' organisations in their reply to the social partner consultations (see also Annex 2). They suggested several measures to promote collective bargaining (including capacity building activities and the introduction of extension mechanisms, when agreed with social partners) and proposed that Member States should take action to increase the collective bargaining coverage rate when it is below 70%. Some employers' organisations stated that collective bargaining is a strong foundation for good wage setting while others proposed various measures (including capacity building activities and increased availability of funds) to encourage social dialogue and support social partners. However, objections were raised by some employers' organisations regarding measures to extend coverage to all workers. At the same time, social partners from some Member States with well-functioning collective bargaining systems, and in particular Denmark and Sweden, expressed concerns about EU action on minimum wages as it could interfere with their labour market model based on collective bargaining. Both the workers' and employers' organisations stressed that any future initiative should not undermine existing well-functioning minimum wage systems, and must respect national competences and traditions, social partners' autonomy and the freedom of collective bargaining.

<u>Measure 1.1</u>: Capacity building for social partners and encouraging negotiations on wages

Member States, in consultation with social partners, would take measures to promote the building and strengthening of the capacity of social partners to engage in collective bargaining on wage setting. In addition, Member States would encourage negotiations on wages among social partners. The choice of the specific actions would be left to the Member States. In the area of capacity building, these could include among others providing financial or technical support, mutual learning, exchange of good practices or qualified training and counselling.

<u>Measure 1.2</u>: Administrative extensions of collective agreements, when agreed with social partners

Member States could introduce extensions of collective agreements so that their terms apply also to workers or firms that are not represented by the signatory social partners.

The conditions and situations for such extensions would be left to the Member States in agreement with social partners at the relevant level.

<u>Measure 1.3:</u> Member States with collective bargaining coverage below 70% to provide for a regulatory framework or enabling conditions and to establish an action plan to promote collective bargaining[94]

In a context of declining collective bargaining coverage, it is key that the Member States put in place all the necessary measures to enhance workers' access to wages set in collective agreements. Member States with a small share of low-wage earners have a collective bargaining coverage rate above 70%.[95] Similarly, the majority of the Member States with high levels of minimum wages relative to the median wage have a collective bargaining coverage above 70%. Therefore, Member States should be encouraged to take action to promote collective bargaining so that the coverage of collective agreements reaches at least 70% of the workforce.[96]

In this regard, Member States would provide for a regulatory framework or create enabling conditions[97] to promote collective bargaining, which could be either set in law or after consultation with social partners or in agreement with them. Among the measures that could be foreseen are: mediation, arbitration and peace clauses in collective agreements; representativeness criteria for social partner organisations; duration of collective agreements; retroactivity and ultra-activity clauses[98] in collective agreements; and measures to improve the availability of collective bargaining to all groups of workers and employers at all levels (national, sectoral and firm level).[99] In addition, Member States would agree with social partners an action plan to promote collective bargaining. The choice of the specific actions to be included would be left to the Member States.

5.3.2 Enforcement and monitoring

This section presents the measures related to enforcement and monitoring considered for Member States where minimum wage protection is provided by collective agreements. Three measures were considered which are not mutually exclusive.

[94] The proposed measure to introduce a reference value of 70% on collective bargaining coverage is in line with the legal basis and it does not go beyond Article 153(5) TFEU since it does not represent an opt-out threshold but should rather aims to incentivise countries with lower collective bargaining coverage to increase it.
[95] There are data limitations related to the measurement of collective bargaining rate (see Annex A4.6).
[96] A target of minimum 70% for collective bargaining coverage was also proposed by the Workers' organisation during the second stage consultation.
[97] Member States differ in the institutional setup of their collective bargaining systems. While a regulatory framework is mainly based on legislation and in principle initiated by the Government, enabling conditions may also be based on other existing national practices.
[98] The length of collective agreements' validity is partly defined by their possible validity related to the period before they were signed (retroactivity) and their validity beyond their expiry date (ultra-activity).
[99] See Annex A11.1 for more detail on these components.

The need for strengthened application and enforcement mechanisms was also identified by both the European workers' and employers' organisations in their reply to the social partners' consultation, however, some employers' organisations stressed that this falls within the competence of national authorities, questioning as such the value of EU action in this area. Some employers' organisations argued that cases of non-compliance and abuses should be addressed for both statutory minimum wages and for wages set in collective agreements, while a couple supported a mapping of the implementation of the social clause in the Public Procurement Directive 2014/24/EU.

Measure 5.1: Strengthening the enforcement of wage clauses in collective agreements

Member States would take measures to ensure that workers have access to dispute resolution mechanisms and a right to redress, including adequate compensation, in the case of non-respect of their rights relating to the minimum wage protection provided by collective agreements. Member States would also take measures to protect workers from any adverse treatment resulting from lodging a complaint for non-respect of their rights. The specific rules for enforcement would be left to Member States to ensure the respect of national practices regarding the enforcement of collective agreements.

Measure 5.2: Ensuring compliance in public procurement with wages set by collective agreements

Article 18(2) of the Public Procurement Directive 2014/24/EU[100] provides that Member States shall take appropriate measures to ensure compliance with the applicable obligations established by labour law and the relevant collective agreements during the performance of public contracts. Building on such provision, under this measure Member States countries where minimum wage protection is provided by collective agreements would require that, in the performance of public or concession contracts, economic operators comply with the collectively agreed wages set in collective agreements.

Measure 5.3: Enhancing monitoring and data collection mechanism on wages set in collective agreements

Member States would develop effective data collection tools to monitor the coverage and adequacy of wages set in collective agreements. Moreover, they would also have to develop tools to monitor the level and adequacy of wages not covered by collective agreements.

[100] Similar provisions are also included in Article 36(2) of Directive 2014/25/EU on procurement by entities operating in the water, energy, transport and postal services sectors and Article 30(3) of Directive 2014/23/EU on the award of concession contracts.

5.4 Measures affecting only Member States with statutory minimum wages

5.4.1 Collective bargaining in wage setting

This section presents the measures considered for Member States with statutory minimum wages in the area of collective bargaining. Three measures were considered which are not mutually exclusive. These are the **same measures as those considered for the case of Member States where minimum wage protection is provided by collective agreements**.

5.4.2 National frameworks to set and update statutory minimum wages

This section presents the measures considered for Member States with statutory minimum wages in the area of national frameworks to set and update statutory minimum wages. Four measures were considered. Among the measures, only measures 2.1 and 2.2 are mutually exclusive. Measures 2.3 and 2.4 could be combined with each other but also possibly together with either measure 2.1 or measure 2.2.

Workers' organisations underlined that statutory minimum wages should be increased to a level at which they ensure at least a decent standard of living and should be updated following a regular, clear and predictable procedure, which fully involves the social partners.[101] In particular, they stated that statutory minimum wages "must not fall below a threshold of both 60% of the full-time gross national median wage and 50% of the full-time national gross average wage". Additionally, statutory minimum wages are to be benchmarked against national reference values such as a basket of goods and services, established in consultation with the social partners. Some employers' organisations stressed the importance of using clear and stable criteria to guide minimum wage setting, which would take into account social and economic developments, including productivity and employment trends and tax and benefits systems, with several stating that this falls within the competence of the national authorities and social partners. Some employers' organisations also stated that they see the added value in developing reference benchmarks at EU level, however, with divergent views on whether the net or gross wages should be considered.

<u>Measure 2.1</u>: **Clear and stable criteria to guide statutory minimum wage setting, and its regular updating, defined in national legislation, and establishment of consultative bodies to advise authorities**

National statutory minimum wage legislation would include provisions on criteria to be taken into account when setting and updating minimum wages to ensure adequacy while reflecting socio-economic developments. Such criteria should include:[102] the purchasing power of minimum wages, taking into account the cost of living, and the contribution of

[101] See Annex 2 for more detail on the results of the two-stage social partner consultation.
[102] Similar criteria are provided in Art 3 of ILO Convention 131 (MW).

taxes and social benefits; the level and distribution of wages in a country; wage growth; and labour productivity developments. These criteria could be potentially used in addition to any existing criteria defined in national legislation. It would be left to Member States to decide how to apply them and whether existing criteria should be maintained.[103] Member States would ensure that minimum wage updates occur regularly and timely, at such frequency as appropriate to safeguard their adequacy.

In addition, Member States would be called upon to put in place or adjust existing consultation bodies to advise national authorities on issues related to statutory minimum wages. It would be for Member States to decide, in the light of national circumstances and traditions, the way in which these bodies could be set up or appointed. Such bodies are already in place in France, Germany, Greece, and Ireland, which would thus not need to take further action in this respect (see Annex A6.2).

Measure 2.2: Automatic indexation mechanisms for statutory minimum wage updates

Relevant provisions on minimum wage setting would establish an automatic indexation mechanism for updating minimum wages whereby minimum wage changes would be automatically linked to developments in economic fundamentals and updated on the basis of a formula. It would be up to the Member States to define the formula to be used but, in order to protect the purchasing power of minimum wages, increases in statutory minimum wages should at least keep up with increases in consumer prices under normal circumstances. Member States could also include a link to wage growth, which generally results in a faster pace of updates. Member States could define criteria under which the automatic indexation would be suspended under exceptional economic circumstances. It would also be possible to decide on increases on top of the ones suggested by the indexation formula. Automatic indexation rules are in use in a number of Member States (Belgium, France, Malta, Netherlands, Luxembourg and Slovenia), either based on the rate of change in consumer prices (inflation) or wages (aggregate or collectively agreed), or a combination of both.

Measure 2.3: Indicators and reference values to guide the assessment of the adequacy of statutory minimum wages

Member States would be called on to use indicative reference values to guide the assessment of adequacy of statutory minimum wages in relation to the general level of gross wages. A list of possible adequacy indicators and respective indicative reference values is provided in Annex A11.2. From this list, two indicators are retained for more detailed assessment: (i) the minimum wage as a ratio to the median wage and (ii) the minimum wage as a ratio to the average wage. Both indicators are commonly used at the international level to compare minimum wages across countries.

[103] See Annex A6.2 for more information on existing minimum wage setting institutions in Member States as well as Section 2.2 and Annex A9.2 for an exposition of related institutional challenges.

Reference values help assess whether the minimum wage is set at an adequate level. Member States will have to compare their minimum wage level to the chosen reference value. Member States can use them in minimum wage setting while taking other considerations into account, notably possible impacts on employment and competitiveness. Common reference values used at the international level include 40%, 45%, and 50% of the average wage and 50%, 55%, and 60% of the median wage. Thus, these reference values are retained for more detailed assessment. These reference values can be combined: for instance, it is possible that Member States take into account the reference values of both 50% of the average wage and 60% of the median wage to guide the assessment of adequacy.

Measure 2.4: Statutory minimum wages to follow a national measure of decent living standards (reference income), developed in consultation with social partners

Member States would be asked to assess the adequacy of the national minimum wages against a reference value based on a measure of decent living standards (reference income). This measure would be based on a basket of goods, defined at a national level.[104] Minimum wage setting would need to balance this criterion with other considerations, such as possible impacts on employment.

5.4.3 Involvement of social partners in statutory minimum wage setting

This section presents the measures considered for Member States with statutory minimum wages in the area of involvement of social partners in statutory minimum wage setting. Two measures were considered which are mutually exclusive.

Workers' organisations called for full and genuine involvement of all social partners in minimum wage setting and updating procedures (see also Annex 2). The employers' organisations welcomed the establishment of well-functioning, effective and timely consultation of social partners, at national and sectoral level, in minimum wage setting, with some stressing that this is essential to ensure that wage setting at national level takes into account the economic situation in the country, as well as in specific sectors, and the impact at company level. In this regard, they proposed to reinforce the involvement of social partners and to establish well-functioning consultation processes.

Measure 3.1: Ensuring the timely and effective involvement of social partners in minimum wage setting and updating

Member States would be called to take measures to ensure that the social partners are involved in an effective and timely manner in the setting and updating of statutory minimum wages. Consultations would guarantee that the views of social partners are taken into account in the decision-making process, in particular on: issues related to the selection and interpretation of objective criteria for setting and updating minimum wage

[104] An additional option for an EU-wide reference income was considered but was disregarded (see section 5.5).

levels, the regularity and timeliness of the updates, the establishment of variations and deductions, and the collection of data. In addition, the social partners would participate in in consultative bodies advising national authorities on statutory minimum wages where they exist.

Measure 3.2: Setting up a bipartite or tripartite body for social partners' consultation with decision-making power

Member States would be called upon to set up a formal, dedicated body to allow for an effective and timely consultation of social partners on the setting and annual updating of statutory minimum wages. This body could be either bipartite or tripartite, depending on national traditions, and it would be the body responsible for all the decision-making regarding the statutory minimum wage, including the criteria to guide updates as well as variations and exemptions. When a decision is reached, it would be binding for all parties. Such structured tripartite bodies are in place in Lithuania, Poland and Slovakia.

5.4.4 Variations, deductions, and exemptions

This section presents the measures considered for Member States with statutory minimum wages in the area of variations, deductions and exemptions. Two measures were considered which are mutually exclusive.

In their reply to the social partners' consultation, European workers' organisations called for eliminating, or at least keeping to a bare minimum, exemptions from statutory minimum wages, sub-minimum wages and deductions (see also Annex 2). The employers' organisations stressed their opposition to eliminating or limiting exemptions and variations, stating that justified exemptions, decided by social partners and/or the national government, should be maintained.

Measure 4.1: Limited and justified use of variations in and deductions from statutory minimum wages

Member States would define variations for specific groups of workers. The variations should be non-discriminatory, proportionate, limited in time, if relevant, and objectively and reasonably justified by a legitimate aim, including employment policy, labour market and vocational training objectives. In addition, Member States would ensure that deductions from minimum wages are necessary, objectively justified and proportionate.

Measure 4.2: Banning variations, exemptions and deductions from statutory minimum wages

Member States would eliminate variations, deductions and exemptions from their statutory national minimum wages.

5.4.5 Enforcement and monitoring

This section presents the measures considered for Member States with statutory minimum wages in the area of enforcement and monitoring. Three measures were considered which are not mutually exclusive. These are measures that are **very similar to those considered for the case of Member States where minimum wage protection is provided by collective agreements**; however, in this case Member States would ensure the enforcement and monitoring of statutory minimum wages as well as of wages set by collective agreements.

Measure 5.1: In the case of Member States with statutory minimum wage this measure implies that Member States would **strengthen the enforcement of statutory minimum wages and wage clauses in collective agreements.**[105]

In particular, Member States with statutory minimum wages, in cooperation with social partners, would be asked to take at least the following measures to **enhance the access of workers to statutory minimum wage protection**: (i) strengthening controls and field inspections by enforcement authorities, (ii) developing guidance to target non-compliant businesses, and (iii) ensuring the availability of information on statutory minimum wages.

In addition, these Member States would also take measures to **ensure that workers have access to dispute resolution mechanisms and a right to redress**, including adequate compensation, in the case of non-respect of their rights relating to statutory minimum wages and to the minimum wage protection provided by collective agreements. Member States would also take measures to protect workers from any adverse treatment resulting from lodging a complaint for non-respect of their rights. The specific rules for enforcement would be left to Member States to ensure the respect of national practices regarding the enforcement of statutory minimum wages and of collective agreement.

Measure 5.2: In the case of Member States with statutory minimum wages, it would imply that, **Member States would ensure compliance in public procurement with wages set by collective agreements and with statutory minimum wages**.

Measure 5.3: In the case of Member States with statutory minimum wage this measure implies that Member States would **enhance monitoring and data collection mechanism on statutory minimum wages and on wages set in collective agreements.**

This implies that in addition to the obligations described in section 5.3.2, Member States with statutory minimum wages would develop effective data collection tools to monitor the coverage and adequacy of statutory minimum wages. This would also include

[105] This is in line with Art 5 of ILO Convention 131 (MW) and Art 14 (b) of ILO Recommendation 135 (MW).

monitoring minimum wage variations and deductions and the share for workers affected by them.

5.5 Measures discarded at an early stage

When considering the policy measures, a number of options have been discarded at an early stage. Most of these have not been listed in the previous subsection.

Options discarded related to strengthening collective bargaining

A number of options were discarded either because of a lack of legal basis or because they did not respect the autonomy of the social partners and their right to negotiate and conclude collective agreements or national competences.

An option to replace the statutory minimum wages with collective bargaining in all countries was also considered but not retained. Collective bargaining is considered as an important way to improve the adequacy of minimum wages, or even as the best way by social partners. However, this measure was discarded from detailed analyses as it was considered as legally not feasible.

Options discarded related to national frameworks to set statutory minimum wages

A number of adequacy indicators related to the net income of minimum wage earners have not been considered as alternative to guide the assessment of minimum wage adequacy. In particular, such discarded indicators compared the net income of minimum wage earners with: (i) the net median wage; (ii) net average wage, and (iii) median net household income.[106] These indicators have significant merit from an analytical point of view, as they allow the comparison of the take-home pay of minimum wage earners across countries. However, they are very complex. Thus using them would make the policy less transparent for workers and companies. Further, these indicators are affected by the tax and benefit system, while minimum wages are set in gross terms ("before taxes"). This has also been pointed out by social partners during the consultation process.

A measure to call for the definition of reference budgets at the EU level to benchmark minimum wage adequacy was considered but not retained. Defining a common concept for a living wage requires a common basket of goods necessary for a decent living in various countries. This has not been done to date and may be challenging due to the differences across countries (and regions) in terms of productivity levels (reflecting businesses' ability to pay) and needs (including climate, customs, etc.).[107] A

[106] These indicators are presented in Annex A8.2. Possible reference values are listed in Annex A11.3.
[107] For a more detailed discussion, see, e.g., Eurofound (2018): "Concept and practice of a living wage", Publications Office of the European Union, Luxembourg. For ongoing research, supported by the European Commission, on reference budgets comparable across the EU, see: https://ec.europa.eu/social/main.jsp?catId=1092&intPageId=2312&langId=en.

socially acceptable minimum decent living standard in one country may be above or below what is socially acceptable in another country. In particular, a "living wage" which is meaningful in higher-wage countries would likely translate to a very high wage in lower-wage countries, despite the lower prices in these countries.

5.6 Description of alternative policy packages

The policy measures presented in Section 5.2 are combined into three policy packages, for the sake of assessing impacts as well as of comparing effectiveness, efficiency and coherence. While many other combinations of measures are theoretically possible, the policy packages below represent coherent sets of measures, which comply with the Treaty provisions (see section 3.1).

These packages are built around two main criteria: (i) the role played by social partners in the governance of the minimum wage setting system and (ii), in the specific case of Member States with statutory minimum wages, the degree of discretion of governments in setting and updating minimum wages.

Specifically, the three packages are the following:

- **Package A** requires all Member States to actively support collective bargaining on wage setting, with a view to strengthening the role of social partners. In addition, for Member States with statutory minimum wages, it requires that national frameworks for setting and updating statutory minimum wages ensure a strong involvement of social partners in the setting of minimum wages. Moreover, this package includes a national measure of decent living standards against which to assess statutory minimum wage adequacy.
- **Package B** asks all Member States to support the capacity building of social partners and encourage wage negotiations on wage setting, as well as support collective bargaining when its coverage is low. In addition, for Member States with statutory minimum wages, it requires that national frameworks are more rule-based than Package A, including explicit criteria for minimum wage adequacy and indicative reference values, with an enhanced role for social partners as compared to the baseline.
- **Package C** also requires all Member States to support the capacity building of social partners and encourage negotiations on wages, as well as to support collective bargaining when its coverage is low. In addition, for Member States with statutory minimum wages, national frameworks should mainly rely on automatic indexation, together with the use of non-binding reference values, to reach the objectives of the initiative.

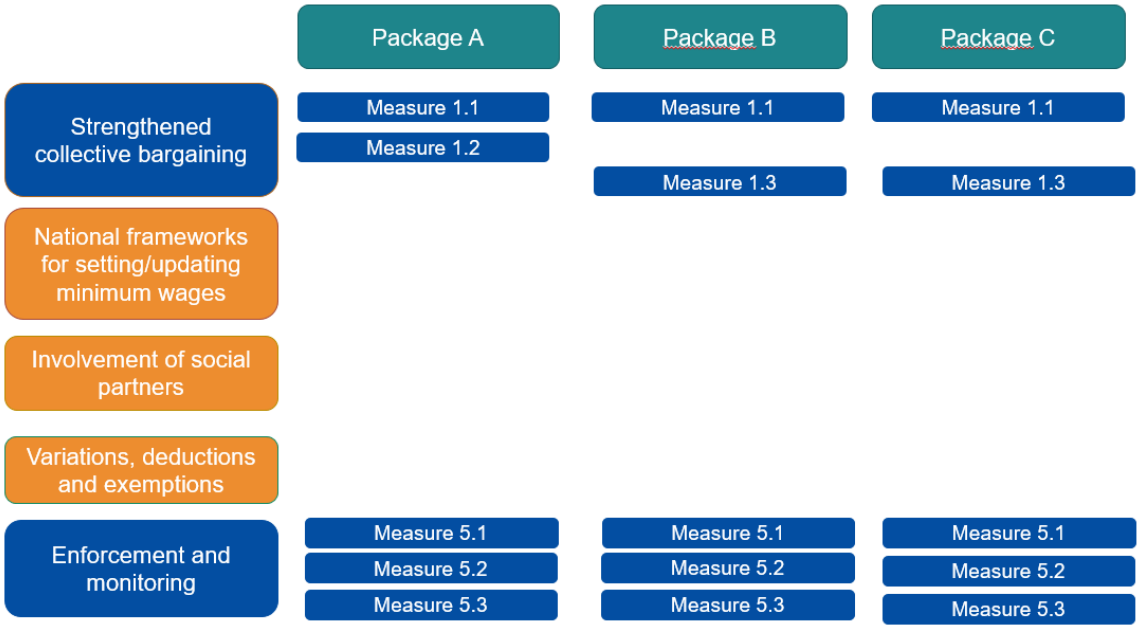
Regarding enforcement and monitoring, all packages include the same provisions, given that these measures are not mutually exclusive and they can all, individually or in combination, contribute to achieving the objectives through addressing different challenges, while their combination would reinforce the expected benefits.

Further details on the composition and the measures included under each intervention can be found in sections 5.6.1 and 5.6.2, as well as the overview table in Annex A11.3. The baseline scenario is discussed in section 5.1. Annex A12.14 presents tables summarising the implications of the packages on the EU Member States.

5.6.1 Member States where minimum wage protection is provided by collective agreements

Graph 4 presents the composition of the packages for Member States where minimum wage protection is provided by collective agreements.

Graph 4: Package composition for Member States relying on collective bargaining to set minimum wages



Packages **differ in terms of the measures for strengthening collective bargaining**, namely in terms of the different role played by Member States to support social partners:

- **Package A** includes measures for promoting capacity building activities for social partners and encouraging negotiations on wages (Measure 1.1). Moreover, in order to reach the specific objective on increased coverage, it requires Member States to extend collective agreements, when agreed with relevant social partners (Measure 1.2). In this package, the underlying framework relies on decisions taken in a bipartite or tripartite setting.
- **Package B** foresees measures for promoting capacity building activities for social partners and encouraging negotiations on wages (Measure 1.1). In addition, as an alternative to Measure 1.2 of Package A, to reach the specific objective on increased collective bargaining coverage, Package B foresees that

in the case of Member States where this coverage rate is below 70% Member States would provide for a regulatory framework or enabling conditions, as well as to establish an action plan to promote collective bargaining (Measure 1.3).

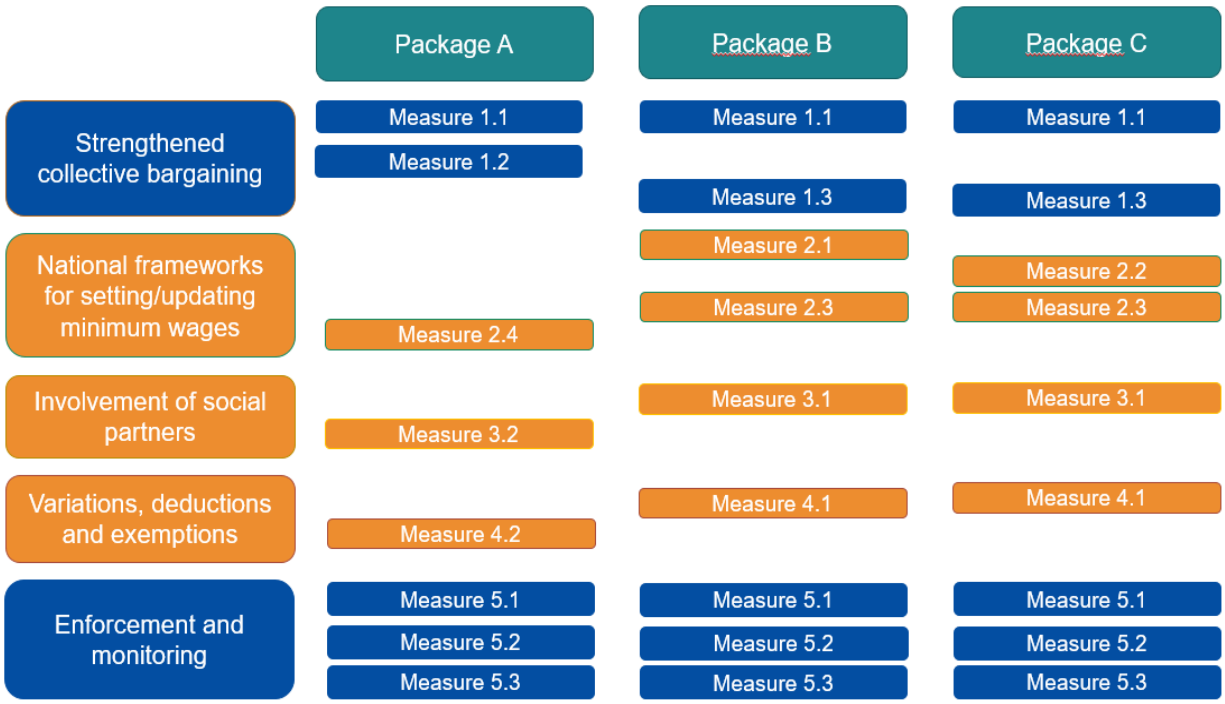
- **Package C,** similarly to Package B, requires all Member States to take action to promote the capacity building of social partners and encourage negotiations on wages (Measure 1.1) and foresees that in the case of Member States where this coverage rate is below 70% Member States would provide for a regulatory framework or enabling conditions, as well as to establish an action plan to promote collective bargaining (Measure 1.3). This is coherent with the approach taken for countries with statutory minimum wages under this package, which is oriented towards more state intervention and automatic decision rules.

All packages include the **same measures on enforcement and monitoring**, namely: strengthening the enforcement of wage clauses in collective agreements (Measures 5.1), ensuring compliance with wages set by collective agreements in public procurement (Measure 5.2), and enhancing monitoring and data collection mechanism on wages set in collective agreements (Measure 5.3). As mentioned above, this is because these measures are not mutually exclusive and they can all, individually or in combination, contribute to addressing the challenges.

5.6.2 Member States with statutory minimum wages

Graph 5 presents the composition of the packages for Member States with statutory minimum wages.

Graph 5: Package composition for Member States with statutory minimum wages



In the area of **collective bargaining**, given that the objective is the same as in the case of Member States which rely on collective bargaining to set minimum wages, **all the packages include the same measures as presented in section 5.6.1**.

The main difference in the composition of the three packages relates to the **governance structures to set and update statutory minimum wages**, including the role of the social partners. As a result, measures differ across packages as follows:

- In **Package A**, national frameworks for statutory minimum wages give a strong and prominent role to the social partners in the decision-making process for setting minimum wages. Besides administrative extensions of collective agreements (Measure 1.2), they include a bipartite or tripartite body (Measure 3.2), with decision-making rights on all the elements of the frameworks. In order to achieve the specific objective of increased adequacy, these bodies are also entrusted to develop a national benchmark for decent living standards against which minimum wage adequacy could be assessed (Measure 2.4). As statutory minimum wages are defined by the social partners, Member States should refrain from setting exemptions and variations and should ban deductions (Measure 4.2).

- In **Package B**, national frameworks rest on rule-based government decision-making with an enhanced role for social partners as compared to the baseline**.** In particular, the package includes an obligation to define criteria in national legislation to guide the setting and updating of minimum wage setting, as well as to establish consultative bodies (Measure 2.1). In addition, as an alternative to Measure 2.4 of Package A, in order to reach the specific objective on increased collective bargaining coverage, Package B foresees indicators and indicative reference values to benchmark minimum wage adequacy (Measure 2.3). Moreover, it provides for a strengthened involvement of social partners (Measure 3.1) and requires that variations and deductions should be objectively justified and proportionate (Measure 4.1).
    - **Different options could be considered under this package regarding the indicative reference values.** These are, 40%, 45%, and 50% of the gross average wage and 50%, 55%, and 60% of the gross median wage, as reference values to benchmark gross minimum wages against.
- In **Package C**, national frameworks rest on a government-driven automatic indexation mechanism. In particular, adjustments in minimum wages are based on a formula defined in the national legislation (Measure 2.2.). To ensure adequacy, this package also includes indicators and indicative reference values to assess minimum wage adequacy (Measure 2.3) and a strengthened involvement of social partners (Measure 3.1) and it requires that variations and deductions are objectively justified and proportionate (Measure 4.1).

Regarding **enforcement and monitoring**, **all packages include the same provisions**, provisions for strengthening the enforcement of statutory minimum wages and of wage clauses in collective agreements (Measure 5.1), an obligation for the government to ensure compliance with wages set out by collective agreements and statutory minimum wages in public procurement (Measure 5.2), and the enhancement of monitoring and data collection mechanisms on statutory minimum wage and on wages set in collective agreements (Measure 5.3). These measures are not mutually exclusive and can all, individually or in combination, contribute to addressing the challenges.

6 WHAT ARE THE EXPECTED IMPACTS OF THE VARIOUS POLICY PACKAGES?

This section presents the main impacts of the policy packages on social and economic outcomes as well as fundamental rights. No environmental impact has been identified for any of the options. Details on the methodology used are provided in Annex 4. More details on impacts, going beyond the discussion of the main text, are included in Annex 12. Significant efforts have been made to collect the necessary data and provide a quantitative assessment. However, in some cases, scarcity of data or other factors may imply that a quantification is not possible. In such cases, a qualitative assessment is provided.

Impacts are compared to the baseline scenario, discussed in Section 5.1, based on a view of how the problem may evolve (Section 2.7). The discussion in each area is divided into two parts: the impacts of all packages are discussed before differences in the impacts of individual packages are presented. The discussion is also divided based on impacts for the two systems of minimum wage setting in the EU: impacts on countries where minimum wage protection is provided by collective agreements are discussed separately from impacts on countries with a statutory national minimum wage. The last subsection summarises the comparison between the packages.

The component measures of the packages fall into the five areas identified in Section 5.2. Measures in all these areas contribute to the attainment of the specific objectives, i.e., more adequate minimum wages for some workers or reducing gaps in coverage.[108]

6.1 Social impacts

Under the baseline scenario, many workers in the EU will not be adequately protected by minimum wages. In some Member States, minimum wages will continue to be inadequate while gaps in the coverage will continue to exist in several Member States (Section 2). Furthermore, there is a risk that the situation of low-wage earners deteriorates further in the context of the Covid-19 pandemic.[109]

[108] These links are summarised in Graph A5.2 in Annex 5.
[109] For more detail on how the problem is expected to evolve, see Section 2.5.

Social impacts under the various policy packages are presented in four subsections. The first two subsections discuss impacts that are common to all packages, starting with impacts on countries where minimum wage protection is provided by collective agreements, and continuing with impacts on countries with a statutory minimum wage. The last two subsections discuss the impacts of individual packages on each system in turn.

6.1.1 Impacts of all packages on Member States where minimum wage protection is provided by collective agreements

All packages are expected to increase the coverage and adequacy of collectively agreed minimum wages as compared to the baseline. All the packages include measures to strengthen collective bargaining and the enforcement of collective agreements and monitoring of minimum wage adequacy and coverage. An impact is expected especially in the case of those countries where the current coverage and adequacy of wages set in collective agreements is lower, namely in Cyprus. Nevertheless, the exact impact will depend on how Member States will implement these measures. None of the packages would necessitate the introduction of a statutory minimum wage in countries that do not have them.

6.1.2 Impacts of all packages on Member States with a statutory national minimum wage

Impact on working conditions

All packages will promote fair working conditions and help to prevent unfairly low wage levels in Member States with a statutory national minimum wage. They will increase the adequacy of minimum wages, support incomes from work and contribute to ensuring decent living standards.[110]

All packages will result in fairer working conditions for vulnerable groups. Fewer groups of workers will receive sub-minimum wages and more workers will be paid the wages they are entitled to. This will be achieved through strengthened enforcement and monitoring of statutory minimum wages. Vulnerable groups, such as women, young and low-skilled workers, as well as those with temporary or part-time jobs have a higher probability of being beneficiaries of minimum wage setting systems than other workers. At the same time, "typical" beneficiaries would be women, adult workers, medium-skilled, and those working in standard jobs.[111] Other provisions, such as strengthening enforcement of existing wages set in collective agreements would reinforce the

[110] Labour incomes increase as long as employment impacts are small. This section as well as Annex A12.4 show that they are indeed expected to be small as compared to the benefits for low-wage earners in increased wages.
[111] See section 2.1.1 for a summary and Annex 7 for details.

protection of vulnerable groups, as they are the groups most affected by non-compliance with existing rules and collective agreements.[112]

Improved national frameworks for setting and updating minimum wages contribute to higher minimum wages and to an improved business environment, both of which bring positive impacts in working conditions. In fact, the regular updating of minimum wages based on appropriate criteria contributes to maintaining the value of minimum wages as they reduce the chance that minimum wages are left unchanged year after year in an economic and social context that would allow increases in minimum wages.[113] At the same time, these elements reduce the uncertainty for both businesses about their costs and for workers about their future entitlements.

The timely and effective involvement of social partners in statutory minimum wage setting and updating will bring additional benefits in terms of good governance. It will improve the involvement of stakeholders in the decision making process, through the establishment of new governance structures. This enhances the role of different actors and makes the decision-making process more informed and inclusive.

Improved working conditions, including improved wages, in low-wage economies may reduce outward labour mobility although this impact is expected to be small. Since the initiative will strengthen minimum wage setting systems and contribute to more adequate minimum wages across the union, it may reduce the incentives of some low earners in low-wage countries to move to another region. At the same time, wage convergence between regions and countries is most importantly driven by the convergence in economic fundamentals, including productivity. This process of wage convergence is ongoing, especially between Eastern and Western Member States.[114]

Impacts on wage inequality and in-work poverty

By increasing minimum wages, all packages are expected to contribute to reducing wage inequality and in-work poverty.[115] Simulations with the Euromod microsimulation model confirm these impacts in EU Member States.[116]

Positive effects on wage inequality will be further enhanced through a strengthened regulatory framework or enabling conditions for collective bargaining, foreseen by all policy packages.[117] Strong collective bargaining ensures that increases in the

[112] Eurofound (2019): Minimum wages in 2019 - Annual review.
[113] Clearer and more stable frameworks for statutory minimum wage setting, and an enhanced involvement of social partners in the process, are expected to overall increase the levels of the minimum wages relative to the average wage. For more details see: European Commission (2016): LMWD 2016 Report, DG EMPL.
[114] For more detail on wage convergence between Member States, see European Commission (2018): LMWD report, Chapter II.2.
[115] See Annex A8.1 for a summary of past research.
[116] For detailed simulation results, see Annex A12.2. The methodology of simulations is described in Annex A4.3.
[117] Visser J., "What happened to collective bargaining during the great recession?", IZA Journal of Labor Policy, 2016.

minimum wage also lead to wage increases higher up the wage distribution by preserving wage differentials.[118]

Impacts on employment and unemployment

The impacts of the packages on employment are expected to be muted. Minimum wages, at levels observed in the EU, do not significantly reduce employment and in some cases, they can even increase it.[119] This is supported by the recent experience of Ireland (in 2000) and Germany (in 2015), where the introduction of a statutory national minimum wage affected 15% (in Germany) and more than 20% (in Ireland) of the workforce, but no impacts on aggregate employment have been identified.[120] A survey of recent 48 high-quality academic studies, including on EU Member States, suggests that the benefits of the minimum wage increase to low-wage earners outweigh its costs to the same group, caused by possible employment impacts, by a ratio of 6-to-1.[121] In the same survey, for the set of studies that consider broad groups of workers, rather than specific demographic groups, the median estimate is close to zero. While there is variation across the studies, and the impacts may depend on the specific context, the weight of the evidence suggests any job losses induced by minimum wage increases at levels observed in advanced economies such as those of EU Member States are quite small.

The impacts on unemployment are a mirror image of employment impacts. The existing body of evidence focuses on the impacts of minimum wages on employment; unemployment impacts are derived from these. This is because, whenever minimum wages have an impact on employment, the opposite impact will be observed in unemployment. A slight gap between both impacts may emerge when inactive workers decide to start searching for a job after a minimum wage increase (see more on work incentives below). Those workers who do not find a job right away will be counted as unemployed. These impacts are however quantitatively small; they have not been quantified in the existing literature.

Employment impacts are expected to be broadly proportional to the benefits to workers, but minimum wages set at very high levels may involve higher risks in terms of employment. Simulations of employment impacts of various scenarios have been conducted for this impact assessment. Simulated employment impacts are

[118] Grimshaw, D. and Bosch, G. (2013) "The intersection between minimum wage and collective bargaining institutions", in Grimshaw, D. (ed.), Minimum wages, pay equity and comparative industrial relations, New York, London: Routledge, 50-80.

[119] This is the conclusion of the last three decades in academic research. For overviews, see Card, D. and A.B. Krueger (2016): "Myth and measurement: The new economics of the minimum wage." Twentieth-anniversary edition, 2016, Princeton University Press; Belman, D., & Wolfson, P. J., "*15 years of research on US employment and the minimum wage."* Tuck School of Business Working Paper, 2016.

[120] See a summary of findings on the Irish and German experience in Annex A12.6. In addition, a statutory national minimum wage was introduced in the UK, then an EU Member State in 1999. Ex-post evaluations have found no negative employment effects of the UK minimum wage. See, e.g., Dolton, P., Ch. Rosazza Bondibene, and J. Wadsworth (2010): "The UK National Minimum Wage in Retrospect", *Fiscal Studies*, vol. 31, no. 4, pp. 509–534.

[121] This is based on the median estimate of an "own-wage elasticity" of -0.16, as estimated by the 48 studies. The survey was compiled by Dube, A. (2019): "Impacts of minimum wages: review of the international evidence", Report prepared for the UK Low-Pay Commission. For a more detailed explanation, see Annex A4.4.

proportional to the wage increase experienced by low-wage earners. The relationship between gains in wages and the negative employment impacts is calibrated based on the evidence cited in the previous paragraph.[122] These simulations are based on evidence which assessed the impacts of minimum wages at levels already observed in advanced economies. Research remains inconclusive about the level up to which the minimum wage can be increased without causing a significant loss in employment.[123] Very high levels of the minimum wage may involve higher employment risks. Employment impacts may also depend on the pace and predictability of minimum wage increases, and whether these take into account economic conditions. Therefore, they also depend on the institutions of statutory minimum wage setting.[73]

Impacts on work incentives

All packages will contribute to enhancing the incentives to work through more adequate wages, leading thus to increased labour market participation. Simulations show that when the gross minimum wage is increased, the financial gain from accepting a job offer increases too.[124] In particular, in a majority of Member States, minimum wage earners keep 50% or more of an increase in their gross wage. This net gain depends on the taxes paid on the additional income and the benefits withdrawn when people take up a job. Thus, the net gain is highest in systems where taxes paid by minimum wage earners are low, and when benefits are not withdrawn. This is the case in Spain, Portugal, Greece and Croatia where workers keep 80% or more of a minimum wage increase. In contrast, in some countries with generous benefits, their withdrawal results in comparatively low financial gains from increased minimum wages (e.g. in the Netherlands, Luxembourg and Malta).

Impact on compliance and undeclared work

All packages include measures to strengthen the enforcement of rules related to minimum wages. This will lead to more people being de facto protected by adequate minimum wages. This is important because otherwise, increasing minimum wage levels may increase the risk of non-compliance, including undeclared work.[125] At the same time, however, in Member States where a practice of "envelope wages" is widespread,

[122] Detailed simulation results are shown in Annex A12.4, while an explanation of the methodology is provided by Annex A4.4.
[123] This point has been made by Card, D. and A.B. Krueger (2016): "Myth and measurement: The new economics of the minimum wage." Twentieth-anniversary edition, 2016, Princeton University Press, preface. This conclusion has also been made by Prof. A. Lindner in his expert report submitted for this impact assessment, based on academic literature on the recent experience of U.S. cities. For a summary of the report, see Annex A4.1.
[124] Simulations with the OECD Tax-Benefit model. For details, see Annex A12.3 and in particular **Error! Reference source not found.** therein. For details on the methodology, see Annex A4.5.
[125] European Commission (2007): "Stepping up the fight against undeclared work", COM(2007)628, Brussels; and Kampelmann, S, A. Garnero and F. Rycx (2013): "Minimum wages in Europe: does the diversity of systems lead to a diversity of outcomes?" ETUI Report 128, pp. 55-58.

higher minimum wages may have an effect in increasing formal wage payments, at the cost of informal payments, to the same worker.[126]

6.1.3 Impacts of the individual packages on Member States where minimum wage protection is provided by collective agreements

Package A would have a significant impact on collective bargaining by introducing administrative extensions to collective agreements. Thus, this is the measure that matters the most for the success of this package in terms of promoting minimum wage protection provided by collective agreements. It would have significant impacts especially in those countries currently not relying on extensions, such as Cyprus, Denmark and Sweden. Administrative extensions would also have a significant impact on industrial relations because they may reduce the incentives of workers to join unions. This is a concern strongly emphasised by stakeholders from Nordic Member States.

Package B includes measures to enhance collective bargaining beyond the measures common to all packages. The measure which matters the most for the success of this Package in terms of promoting minimum wage protection provided by collective agreements is the provision for a target level of 70% for collective bargaining coverage to trigger action in Member States in support of collective bargaining. This Package is expected to have additional impacts especially in Cyprus, where the coverage rate is below 70%. In the other countries where minimum wage protection is provided by collective agreements, collective bargaining coverage is already above 70%. In these Member States, the Package will help ensure that these levels are maintained.

Finally, Package C is expected to have the same impact as Package B. This is because it includes exactly the same measures as Package B, namely, capacity building of social partners and encouraging negotiations on wages and the obligation to provide for a regulatory framework or enabling conditions, as well as to establish an action plan to promote collective bargaining in the case of Member States where this coverage rate is below 70% Member States.

The positive impacts of all the packages are **reinforced through the provisions for enhanced enforcement and monitoring**. In particular, both strengthening enforcement of wage clauses in collective agreements and ensuring compliance in public procurement with wages set out by collective agreements, can have a significant positive impact on promoting minimum wage protection provided by collective agreements. Both of these measures, individually or in combination, contribute to addressing incidences of non-compliance, which appears to be a significant phenomenon in many countries, while their combination would reinforce the expected benefits in reaching the objectives of the initiative. The measure on enhancing monitoring and data collection mechanism on

[126] For a discussion of this effect, see Harasztosi, P., and A. Lindner. 2019. "Who Pays for the Minimum Wage?" *American Economic Review*, 109 (8): 2693-2727.

wages set in collective agreements would help improve the quality and comparability of data on collective bargaining coverage and of the data on the share of workers not protected by collective agreements (see Annex A4.6 for more details).

6.1.4 Impacts of the individual packages on Member States with statutory minimum wages

Package A will have positive social impacts of medium magnitude, **mainly due to the bipartite or tripartite body** with decision-making rights about many aspects of the minimum wage framework including a national benchmark of minimum wage adequacy; as well as due to administrative extensions of collective agreements. However, it is the combination of the selected measures, and their reinforcing effects (described below) that matter the most for the success of this Package in terms of reaching the objective of the initiative.

The bipartite or tripartite setting, with regular updates, would have a medium positive impact on the adequacy of statutory minimum wages. Regular updates in a bipartite or tripartite setting are expected to be the most beneficial in Member States where regularity and timeliness are not defined by law. This package would have an impact especially in Member States that do not have a bipartite or tripartite decision-making body in place.[127] However, it bears the risk that it may take disproportionally long to reach an agreement, due to insufficient capacity of participants or lack of national traditions, which could reduce positive impacts of this package on the adequacy and coverage of the minimum wages in some Member States. The effectiveness of such a system may also depend on the rules of update in case no decision is reached in the bipartite or tripartite bodies.

In addition, complementing the assessment of statutory minimum wages by a measure of decent living would strengthen their adequacy.[128] Benefits would be expected especially in countries in which many minimum wage earners report difficulties in making ends meet,[129] mostly in Central-Eastern and Southern European Member States, which may contribute to a convergence in minimum wages. This process would be gradual since national decision-making processes would balance convergence to this standard against considerations of employment and competitiveness.

The banning of variations, deductions and exemptions from statutory minimum wages has also the potential to contribute to increasing the adequacy and coverage of minimum wages.

[127] Currently, a formalised tripartite decision-making process on minimum wages is in place in only three Member States (Lithuania, Poland, and Slovakia) where the government cannot deviate from the tripartite agreement, if one is reached. However, even in these cases, the government can set the minimum wage unilaterally if an agreement cannot be reached. A similar bipartite system is in place in Belgium and Estonia.
[128] This is the suboption including Measure 2.4, as described in Section 5.4.2.
[129] See especially Graph A8.7 in Annex A8.2.

By strengthening collective bargaining especially by administrative extensions of collective agreements, Package A is expected to improve minimum wage adequacy, and reduce the incidence of low pay.[130] The measure on extending collective agreements when this is agreed with relevant social partners could have a direct impact on increasing the collective bargaining coverage in some Member States. It also has the potential to limit wage inequality by setting common working conditions within sectors.[131] At the same time, administrative extensions may reduce workers' incentives to join a union which may have unintended negative consequences for industrial relations systems in Member States.

Extensions in combination with other measures, including enhancing social partners' capacity and encouraging wage negotiations will lead to more efficient collective bargaining, as well as social dialogue (for more information see Annex A12.10).[132] Well-organised social partners with a broad support base contribute to the attainment of high collective bargaining coverage, which would benefit more Member States where social partners' capacity is relatively weak.[133] Higher collective bargaining coverage has a positive impact on wages in general, which has an indirect positive impact on statutory minimum wages (see Section 2.5.1). It is also associated with a lower share of low-wage workers. Studies show that capacity building can also contribute to strengthening compliance.[134] Finally, strengthened collective bargaining on wages may also have spill-over effects, resulting in better working conditions in other areas negotiated by social partners.

Package B has strong positive social impacts. In particular, the **requirement to use indicators and indicative reference values to assess the adequacy of minimum wages is mainly responsible for the strong impacts** of Package B. Even though these reference values are not binding, it is expected that Member States will attain them over time. However, as in the case of Package A, it is the combination of the selected measures, and their reinforcing effects (described below) that matter the most for the success of this Package in terms of reaching the objective of the initiative.

Indicative reference values could have significant positive social impacts. The highest of these (50% of the gross average wage and 60% of the median) are close to the highest actual statutory minimum wages currently observed in the EU. Low reference values (40% of the average wage or 50% of the median) would imply a gap to close for one-quarter to one-third of Member States, while intermediate reference values would imply gaps to close for one-half to two-thirds of the Member States. Such minimum

[130] Schulten, T. (2015) "Mindestlohn und Tarifbindung – als Mittel der Begrenzung von Lohnungleichheit in Europa", Presentation at the WSI-Herbstforum, 26.
[131] Hijzen A. and Martins P., "No Extension without Representation? Evidence from a Natural Experiment in Collective Bargaining", IMF Working Paper WP/16/143, July 2016.
[132] Eurofound working paper (2020), Exploring how to support capacity-building for effective social dialogue.
[133] Bulgaria, Cyprus, Czechia, Estonia, Greece, and Romania.
[134] Benassi, C. (2011): The Implementation of Minimum Wage: Challenges and Creative Solutions, Global Labour University, Working Paper No 12.

wage increases would imply significant positive social impacts in terms of increased wages for minimum wage earners, reduced wage inequality and in-work poverty. If the reference values are used, this will lead to reductions in in-work poverty of about 10% (lower reference values) or even above 20% in some Member States (for higher reference values). These benefits to low-wage earners are expected to greatly outweigh costs in terms of reduced employment, which may in some Member States reach 0.2% (for lower reference values), 0.5% (for intermediate ones) or in a few cases 1% (for the highest reference values). See Annex 12.9.3 for more detail on the impacts of various reference values.

As the reference values would be indicative, the full magnitude of the social impacts (both benefits and the smaller costs) would materialise only in case of full compliance. Compliance may be gradual and incomplete, especially in cases where the gap to be closed for a Member State is large. Gradual benefits would be expected especially in countries in which many minimum wage earners report difficulties in making ends meet.[135]

Limiting the use of variations, deductions and exemptions from statutory minimum wages to well justified and proportionate cases would also contribute to increasing the adequacy and coverage of minimum wages, but with a more limited impact than in Package A.

The measure introducing a 70% target on the collective bargaining coverage rate to trigger action by Member States[136] could have a direct impact on increasing coverage in some Member States. This in turn is expected to have an indirect positive impact on the adequacy of minimum wages in Member States with low collective bargaining coverage, although the extent of this impact depends on the actions taken by the Member States in consultation with social partners.

The main unintended consequence of this package is that the use of a reference value could become a focal point in the collective bargaining negotiations on wages set in collective agreements. For the countries with high wage levels, this could weaken the additional impact of collective bargaining on adequacy. This indirect consequence is mitigated by the measures to support collective bargaining, including reinforcing the regulatory framework and establishing an action plan to promote collective bargaining in the countries lagging behind in the coverage rate of collective agreements.

Package C would also lead to significant positive social impacts. These positive impacts **arise through the measures on automatic indexation of statutory minimum wages, combined with indicators and indicative reference values of minimum wage adequacy**, similarly to Package B. Automatic indexation may in some cases reinforce the

[135] See especially Graph A8.7 in Annex A8.2.

[136] According to the latest data (see Annex A9.1), ten Member States would be exempted from taking any action (Austria, Belgium, Denmark, Finland, France, Italy, the Netherlands, Portugal, Slovenia and Sweden). For data issues related to collective bargaining coverage see Annex A4.6.

impact of adequacy targets. This is because, in an indexation system, the impact of one-off discretionary increases in the minimum wage is maintained by the automatic increases in the following years.

Currently, automatic indexation is applied in six Member States (Belgium, France, Luxembourg, Malta, Netherlands and Slovenia), so the package implies respective reforms in all the other Member States with statutory minimum wages. It is expected that the impacts of this package will be stronger in Member States where the national legislation does not define criteria or indicators to set and update the minimum wage;[137] in Member States where the regularity of the updates is not defined by law[138] and in Member States where the involvement of social partners in statutory minimum wage setting is limited.[139]

Furthermore, similar to Package B, limiting the use of variations, deductions and exemptions from statutory minimum wages to well justified and proportionate cases would also contribute to increasing the adequacy and coverage of minimum wages, but again with a more limited impact than in Package A. These effects will be strengthened by the measure to introduce a 70% target on the collective bargaining coverage rate to trigger action by Member States to promote collective bargaining.

At the same time, Package C could lead to unintended consequences related to national industrial relations. This is because automatic indexation of statutory minimum wages could significantly reduce the scope of social partners' influence on minimum wages and on wage developments in general. This can in turn lead to a decrease in union density and in the coverage of collective agreements. The measures to strengthen the capacity of social partners and encourage negotiations on wages and the measure to support collective bargaining when it is low can partly mitigate this indirect consequence.

Finally, as in the case of Member States where minimum wage protection is provided by collective agreements, the positive impacts of all the packages are **reinforced through the provisions for enhanced enforcement and monitoring**. In particular, strengthening enforcement of statutory minimum wages and of wage clauses in collective agreements and ensuring compliance in public procurement with wages set by collective agreements and statutory minimum wages, can have a significant positive impact on both the adequacy and coverage objectives of this initiative. Both measures, individually or in combination, contribute to addressing incidences of non-compliance, which are drivers of gaps in coverage and insufficient adequacy of statutory minimum wage and unfair competition, while their combination would reinforce the expected benefits. The measure on enhancing monitoring and data collection mechanism on statutory minimum wages and wages set in collective agreements would help collect uniform and comparable data

[137] This is the case in Bulgaria, Estonia, Lithuania, and Romania.
[138] I.e., in Bulgaria, Czechia, Estonia, Ireland and Romania.
[139] I.e., in Bulgaria, Czechia, Spain, Croatia, Hungary, Latvia, Malta, Poland, Portugal, Slovenia and Romania.

in view of monitoring the progress achieved in the implementation of the initiative. Furthermore, reliable EU monitoring and data collection contributes to the transparency of the national systems.

Box 1: Social impacts of various indicative reference values in Packages B and C

To estimate the magnitude of the social and economic impacts of various reference values, a microsimulation exercise has been conducted using the Euromod model.[140]

The highest reference values are close to the highest statutory minimum wages currently observed in the EU. According to Eurostat estimations for 2019, only Portugal has a statutory minimum wage above 60% of the median and 50% of the average wage. Bulgaria, France and Slovenia are at or close to 60% of the median, while countries approximating 50% of the average wage are France, Slovenia and Spain.[141]

In contrast, the lower reference values would imply a gap to be closed for about one-quarter to one-third of Member States. A reference value of 50% of the median wage would imply increases for 9 Member States from their 2019 levels (Czechia, Croatia, Estonia, Germany, Greece, Ireland, Latvia, Malta, the Netherlands; the implied increase would be small in Croatia, Greece and the Netherlands). Meanwhile, a reference value of 40% of the average wage would imply increases for 6 Member States: Czechia, Estonia, Hungary, Ireland, Latvia and Malta. See also Graph A12.1 and Table A12.1 in Annex A12.1.

Intermediate reference values would imply gaps to close for one-half to two-thirds of the Member States. In particular, an intermediate reference value of 55% of the median wage would imply increases for 15 Member States. These are, in addition to the ones below 50% in 2019: Belgium, Slovakia, Hungary, Lithuania, Luxembourg and Poland. Meanwhile, an intermediate reference value of 45% of the average wage would imply increases for 17 Member States. These are, in addition to the ones below 40% in 2019: Belgium, Bulgaria, Croatia, Germany, Greece, Lithuania, Luxembourg, the Netherlands, Poland, Romania and Slovakia.

While more or less stringent reference values can be defined both in terms of the average and the median wage, both indicators have somewhat different implications for individual Member States. In particular, reference values based on the average wage are somewhat more stringent for Member States with generally lower or intermediate wage levels such as Bulgaria, Hungary, Portugal and Romania, while reference values based on the median wage are somewhat more stringent for some intermediate-to-higher wage countries such as Belgium, Germany, Greece, Malta, and the Netherlands.

[140] Annex A12.1 presents simulations of impacts on wages, Annex A12.2 on other social impacts (wage inequality, in-work poverty, the gender pay gap), while Annex A12.4 presents employment impacts. For a description of the methodology, see Annex A4.3.

[141] See also **Error! Reference source not found.** on page 5.

Reaching indicative reference values could increase the wages of more than 20 million workers (highest reference values) or 10 million workers (intermediate reference values). If Member States increased their minimum wages to the highest reference values, wages could increase for 22 million workers (at 60% of the median wage) or 24 million workers (at 50% of the average wage). At intermediate reference values, the number of direct beneficiaries is estimated to be 11 million (55% of median wage) and 12 million (45% of the average wage). The difference is larger between both low reference values: if statutory minimum wages were increased to 50% of the median wage, this would increase wages for 5.4 million workers, while increases to 40% of the average wage would benefit 0.7 million workers.[142]

Higher reference values have a higher impact on overall wages. In particular, minimum wage increases to the level of the highest reference values would imply increases in overall wages of about 1% at the EU level. Increases to intermediate reference values would imply an overall wage increase of about 0.4%, while the lower reference values imply smaller increases.[143] These social benefits in terms of increased wages are shown by Member States in Graph A12.4 in Annex A12.1.

Significant reductions in in-work poverty are implied if Member States increase their minimum wages to various possible reference values.[144] These impacts depend on the magnitude of the minimum wage increase implied by various reference values, but also the number of workers affected in each country, among other factors. In particular, eight EU countries would witness a reduction by more than 20% in in-work poverty should they increase their statutory minimum wage to a reference value of 60% of the median gross wage or 50% of the average. The most significant reductions in in-work poverty would be observed in Estonia, Greece and Romania where in-work poverty is comparatively high, but also in Germany, Hungary and Luxembourg, albeit from a lower baseline. More significant reductions would be typically between 10% and 20% if minimum wages were increased to the intermediate reference values (45% of the average wage or 55% of the median), while they would remain close or below 10% for the lower values (40% of the average wage or 50% of the median).

Minimum wages increase wages of low-wage earners much more than their possible negative impact on jobs.[145] Possible negative employment effects would remain below 0.2% in most cases if all Member States increased their minimum wages to the lower reference values. The employment effect would exceed this in Estonia and Ireland in the case of 40% of the average wage and, in addition, in Germany, Greece and Luxembourg in the case of 50% of the median wage. Possible negative employment effects would

[142] Calculations based on Euromod simulations on the share of workers affected (Annex A12.1) and LFS data on the number of employees in 2019.
[143] The estimated increase in the EU wage bill is about 0.2% with all statutory minimum wages at 50% of the median wage, while the increase is 0.01% at 40% of the average wage.
[144] For more detail on the social impacts of hypothetical minimum wage scenarios, see Annex A12.2.
[145] For more detail on the employment impacts of hypothetical minimum wage scenarios, see Annex A12.4.

remain below 0.5% of total employment in most cases if minimum wages were increased to intermediate reference values, and below 1% in all cases. Employment effects would remain below 0.8% in most cases for high reference values, but would reach 1% in Greece and Estonia and Ireland (at 60% of the median wage) as well as in Greece and in Romania (at 50% of the average wage).

6.2 Economic impacts

Economic impacts of various policy packages are presented, as in the case of social impacts in the previous section, in four subsections. The first two subsections discuss impacts that are common to all packages, for each minimum wage setting system separately. The last two subsections present impacts that are specific to individual policy packages; this discussion is also divided by minimum wage setting systems.

6.2.1 Impacts of all packages on Member States where minimum wage protection is provided by collective agreements

The economic impacts of all packages are expected to be small in countries where minimum wage protection is provided by collective agreements. Measures related to strengthening collective bargaining are expected to increase the coverage and adequacy of wages set in collective agreements, although the exact impact depends on the action taken by Member States. These measures are expected to bring some social benefits (see Section 6.1.1) but are not expected to lead to significant economic impacts.

At the same time, some economic costs can be expected under all packages, especially for public authorities, however, it is not possible to quantify the magnitude of these costs. These include small one-off costs that could arise in the case Member States would be required to provide for a regulatory framework or enabling conditions, and to establish an action plan to promote collective bargaining. These costs could be accompanied by respective small one-off costs of familiarisation with the new provisions. In addition, Member States could incur costs arising from promoting capacity building activities for social partners, the magnitude of which will depend on the amount of funds that Member States will choose to dedicate. Finally, additional costs might arise from the implementation of the enforcement and monitoring provisions (for more information on the latter see section 6.2.3).

6.2.2 Impacts of all packages on Member States with a statutory national minimum wage

<u>Impact on labour costs, prices and profits</u>

By contributing to higher minimum wages, the economic effects of all packages include increased labour costs for firms, increased prices and, to a lesser extent,

lower profits. Increased wage costs are a direct consequence of increased wages paid to minimum wage earners.[146] The ensuing effects on prices and profits depend on whether firms can pass on higher wage costs to consumers through price increases or if they can counterbalance them by cutting costs elsewhere or through increased productivity. Past research found some evidence that minimum wage increases lead to increases in prices, and only limited evidence that they lead to a reduction in profits.[147] More recent research, based on previously inaccessible data sources which link information on employees with employer balance sheets, found that minimum wage increases indeed result in an improved situation for low-wage workers (despite higher prices), while the costs are borne by higher-wage workers (as a result of increased prices) and, to a lesser extent, firms (in the form of reduced profits).[148] The study finds that about ¾ of the economic cost of higher minimum wages is borne by consumers, while about ¼ is borne by firms. This particular estimate reflects the specific context of Hungary, a transition economy, facing increasing international competition for its exporting firms in the runup to its accession to the EU, and issues related to non-compliance (e.g. the practice of envelope wages) possibly cushioning the effects for smaller firms more than for others. Nevertheless, it is valuable because it is the first direct estimate of these shares due to the high-quality data used in the study.[149] In general, the impact on firms is mitigated by the fact that the propensity to consume of low-wage earners is relatively higher, thus supporting domestic demand.[150]

Impacts on consumption

All packages are also expected to increase the consumption of lower-income groups, while the impact on aggregate consumption would be small. Since higher minimum wages increase the income of low-wage earners, but indirectly also consumer prices, the impact on consumption is theoretically ambiguous. Recent evidence, including analysis by the European Commission found that higher minimum wages have a positive impact on the consumption of low-income groups, in spite of increased prices, while the effect of higher minimum wages on the consumption of higher-income groups is not statistically significantly different from zero.[151]

[146] The countervailing impact of reduced employment is small, as is shown in the discussion in the previous subsection.
[147] See, e.g., Card and Krueger (2016): "Myth and measurement: The new economics of the minimum wage." Twentieth-anniversary edition, 2016, Princeton University Press, especially Chapter 10.
[148] Harasztosi and Lindner (2019): "Who Pays for the Minimum Wage?" *American Economic Review* 109 (8), pp. 2693-2727. The authors find that "around 25 percent of the increased cost of labour is covered by lower profits, and so paid by the firm owners, and around 75 percent is paid by consumers in the form of higher revenue. […] Since the minimum wage raised income of low-wage workers, while the higher output prices are more or less equally shared among consumers, our evidence underscores that the minimum wage is an effective redistributive policy."
[149] Qualitatively, the findings are in line with the body of literature surveyed by Card and Krueger (2016, op cit).
[150] See Annex A12.5 (b)) and European Commission (2016): LMWD 2016 Report, DG EMPL.
[151] See Annex A12.5 (a)) and European Commission (2016): LMWD 2016 Report, DG EMPL.

Impacts on output, competitiveness, productivity, and the business environment

The impact of the packages on aggregate output and productivity will most likely be small while the direction of the impact is ambiguous. Economic models suggest that the effect of minimum wages on economic activity is broadly neutral whenever employment effects are small. Moreover, when impacts on employment and output are small, cross-border effects, i.e., impacts on the internal market through an effect on the aggregate competitiveness of export industries, are also small.[152] (See a discussion of possible sectoral impacts below.)[153] The simulations prepared for this impact assessment show that, while the wage increases for minimum wage earners exceed 10% or even 20% in a number of Member States and scenarios, the increase in the overall wage bill is more muted, rarely exceeding 1%. This means that increased minimum wage levels as a result of the initiative are not expected to significantly impact aggregate competitiveness of Member States. The experience of Member States that introduced a statutory national minimum wage in recent years also suggests no negative impacts on output, productivity or competitiveness, even though, admittedly, the Member States at the time enjoyed a favourable growth environment.[154]

At the same time, all the packages may have positive impacts on productivity at the level of the individual firm. A recent ECB survey of Central and Eastern European firms finds that most executives would react to minimum wage increases by cutting non-labour costs, increasing product prices, and improving productivity.[155] Evidence in specific countries suggests that minimum wage increases can indeed increase productivity in the low-paid sector.[156]

In addition, Packages A and B can improve productivity by strengthening collective bargaining. Strong collective bargaining leads to better wage conditions, which may induce employees to work more productively and companies to adapt faster and more smoothly to changed market conditions, thus fostering productivity growth.[157]

By means of clear and stable frameworks for minimum wage setting, all packages would also improve the business environment, reduce uncertainty and volatility and enable employers to plan ahead. At the same time, the strengthened involvement of social partners in setting the statutory minimum wage also leads to a more predictable

[152] European Commission (2019): "Macroeconomic effects of minimum wages: Model-based simulations using the QUEST model", DG ECFIN. See a summary in Annex A4.1.
[153] European Commission (2019): "Macroeconomic effects of minimum wages: Model-based simulations using the QUEST model", DG ECFIN. See a summary in Annex A4.1.
[154] See Annex A12.6 for a survey.
[155] Bodnár, K., L. Fadejeva, S. Iordache, L. Malk, D. Paskaleva, J. Pesliakaitė, N. Todorović Jemec, P. Tóth & R. Wyszyński. (2018): "How do firms adjust to rises in the minimum wage? Survey evidence from Central and Eastern Europe" *IZA Journal of Labor Policy*, Volume 7.
[156] Rizov, M, R Croucher and T Lange (2016), "The UK National Minimum Wage's Impact on Productivity," *British Journal of Management* 27(4): 819–835).
[157] Policardo L., Punzo, L. F. and Sanchez Carreras E. J., "Wage inequality and labor productivity in OECD countries", 2018.

minimum wage setting, which takes into account all relevant social and economic developments preserving as such employment and competitiveness. Furthermore, taking into account their views can have positive effects on the investment decisions of firms.

Improved enforcement of minimum wage rules has positive effects for compliant firms. This is because it reduces or eliminates the illegitimate cost advantage of non-compliant firms. Since the incidence of non-compliance is likely to be higher in services sectors and in small firms, it is likely that its economic impacts involve somewhat increased prices by such providers but international competitiveness is unlikely to be affected.

Sectoral impacts

The impacts of the considered policy packages on specific sectors depend on whether they employ many minimum wage earners and whether the demand for their output is sensitive to domestic purchasing power. Such impacts are expected to be modest for firms active in sectors that are sensitive to domestic demand for two reasons. First, their main competitors are also affected by the same policy change, so it is more likely that this increase in labour costs will be passed on to the consumers. Second, the minimum wage increase raises the purchasing power of low-wage workers, which may increase the demand for their products and services.

Potentially negative impacts on external competitiveness, notably in agriculture and industry, are possible and should be monitored by Member States. These sectors are likely to be less able to pass on cost increases to consumers as they are more integrated into external markets than others. In agriculture, about one in four workers are minimum wage earners, while the share of minimum wage earners is lower in industry (about 8%) than in other sectors.[158] However, since these sectors, and especially agriculture, have a relatively small share in overall employment, most minimum wage earners are not employed in agriculture or industry, but rather in services.[159] Patterns vary across Member States, and there are a few Member States where both the share of minimum wage earners is comparatively high and many of them work in agriculture or industry. In particular, this is the case in some Central and Eastern European Member States (e.g. in Bulgaria, Croatia, and Romania).[160] In these cases, such impacts may be stronger. This should be taken into account in the minimum wage setting framework as part of the relevant economic circumstances when informing the setting and updating of the statutory minimum wage.

[158] See Annex A7.2, and in particular, Graph A7.7, for more details. The high share of low-wage earners in agriculture is also emphasises in a recent study by the European Commission (2020): "Meeting labour demand in agriculture in times of COVID 19 pandemic", Joint Research Centre (link).
[159] See Graph A7.6 in Annex A7.2.
[160] See Graph A7.1 in Annex A7.1 and Graph A7.6 in Annex A7.2.

Impacts on SMEs

As a result of increased minimum wages, labour costs of small and medium sized enterprises (SMEs) will increase. Employees of SMEs have a higher chance of being minimum wage earners. In particular, while SMEs (with less than 250 employees) employ about two-thirds of all workers in the EU,[161] they employ almost 90% of minimum wage earners. Similarly, while small firms with less than 50 employees employ about one-half of all workers in the EU, they are estimated to employ about two-thirds of minimum wage earners.[162] For this reason, SMEs are more affected by minimum wage increases than other firms. In particular, the increase in labour costs to SMEs (or small firms) is expected to be proportional to their share in the employment of minimum-wage earners. At the same time, since many of them are active in sectors sensitive to domestic demand, they may pass on these costs to increased prices, also because increased minimum wages may increase demand for their services. Calculations on direct costs for SMEs implied by various non-binding reference values of minimum wage adequacy are reported in Box 2 in Section 6.2.4.

A boost in domestic spending following minimum wage increases may explain why the academic literature has not found systematic evidence that small firms are more negatively affected by minimum wage increases than other firms. In contrast, the extensive academic literature on restaurants has found that, in most cases, enterprises in this sector may benefit from minimum wage increases.[163] Most of the existing evidence is based on sector-specific studies, in particular those related to the hospitality sector which employs many minimum wage earners, while studies focusing on impacts on SMEs in general are scarce. Only recent studies have been able to assess the impacts of minimum wage increases on a broader range of SMEs. According to one of these studies, the 2015 introduction of the minimum wage in Germany has not reduced employment,[164] but it may have induced a movement of some workers from smaller firms to better-paying jobs, in some cases offered by larger companies.[165] This implies that some small companies, especially in low-wage regions, may find it difficult to compete for workers when minimum wages are increased. This appears to be true especially for small firms

[161] Eurostat: Structural business statistics overview.

[162] On the distribution of minimum wage earners by firm size, see Annex 7.2, and in particular Graph A7.8. The graphs are based on EU-SILC data which do not allow a differentiation between medium-sized and large firms. Combining these data with information with EU-SES, a similar picture emerges for all SMEs: these firms (employing up to 250 employees) employ about two-thirds of all workers in the EU, and almost 90% of all minimum wage earners.

[163] The first major scientific study finding positive impacts of minimum wages on employment was a study of fast food restaurants: Card, D. and A. B. Krueger (1994) "Minimum Wages and Employment: A Case Study of the New Jersey and Pennsylvania Fast Food Industries," *American Economic Review*, 84(4): 772-793. More recent studies have found similar results, see, e.g.: Dube, A., S. Naidu, and M. Reich. 2007. "The economic effects of a citywide minimum wage," *ILR Review*, 60(4): 522-543; Hirsch, Barry T, Bruce E Kaufman, and Tetyana Zelenska. 2015. "Minimum wage channels of adjustment," *Industrial Relations: A Journal of Economy and Society*, 54(2): 199-239.

[164] The employment rate in Germany in the 15-64 age group increased from 73.8 in 2014 to 74.7 in 2016, in the context of an EU-wide recovery. The studies assessing the impacts of the introduction of the minimum wage are not based on these aggregate figures but rather compare more affected regions and firms with less affected ones to tease out the causal effects of the minimum wage.

[165] Dustmann, Ch., A. Lindner, U. Schönberg, M. Umkehrer, and Ph. vom Berge (2020) "Reallocation Effects of the Minimum Wage: Evidence From Germany", CREAM Discussion Paper 07/20, University College London.

with less than 50 employees, while medium-sized companies (between 50 and 250 employees) appear to have increased their employment after the minimum wage increase, similarly to larger ones.[166]

Minimum wages may also have unintended consequences on business dynamics, but research is inconclusive about these effects so far. The case study on the introduction of the German minimum wage has found that small firms in more affected regions appear to have have had an increased rate of exit after the introduction of the statutory minimum wage in 2015.[167] The body of existing evidence on this is, however, inconclusive.[168]

On the other hand, SMEs are expected to profit from more stable and transparent mechanisms to set statutory minimum wages. This will help SMEs to anticipate developments in the minimum wage and mitigate any negative impacts. The quality of minimum wage setting frameworks, including the involvement of social partners, was emphasised by employer representatives during the consultations.[169] In addition, in cases with significant negative unintended consequences for SMEs, Member States may choose a more gradual approach to increase minimum wages, or may adopt mitigating measures such as reducing the tax or contribution burden on minimum wages.

Moreover, all packages provide flexibility to Member States to adjust minimum wage increases taking into account the impact on SMEs. In package A, the prominent role of the social partners in the decision-making process for setting minimum wages would ensure that the interests of SMEs are duly taken into account when setting and updating minimum wages. In package B and C, as the reference values would be indicative, compliance with adequacy indicators could be gradual taking into account the economic circumstances and specificities of SMEs, especially in cases where the potential negative impact of minimum wage adjustments on these firms would be large.

Impact on public budgets and public authorities

Through minimum wage increases, the initiative is expected to have a small but positive effect on public budgets.[170] According to analysis done with the Euromod microsimulation model, fiscal effects of increased minimum wages are estimated to be positive in almost all cases, driven by increases in tax revenues and reductions of benefit

[166] Calculations by Prof. A. Lindner based on Dustmann et al. (2020, op. cit.), in his expert report submitted for this impact assessment, on the "Effects of statutory minimum wages on small and medium-sized enterprises". For a summary of this report, see Annex A4.1.
[167] Dustmann et al. (2020, op cit.)
[168] For example, Rohlin (2010) finds no indication that exit rates increase in response to the minimum wage, but finds that firm entry is reduced at the most exposed industries. On the other hand, Aaronson et al. (2018) find that both exit and entry rates increase in the restaurant sector, especially for chain restaurants. See: Rohlin, Shawn M., 2011. "State minimum wages and business location: Evidence from a refined border approach," Journal of Urban Economics, Elsevier, vol. 69(1), pages 103-117, January; Aaronson, D., French, E., Sorkin, I. and To, T. 2018. "Industry Dynamics and the Minimum Wage: A Putty-Clay Approach." International Economic Review, 59: 51-84.
[169] SMEUnited (2020): Response to first phase consultation of social partners under Art 154 TFEU on a possible action addressing the challenges related to fair minimum wages; See Annex 2 for a summary of consultations.
[170] For a description of the methodology, see Annex 4.

expenditure. The magnitude of these effects is small. The overall improvement of public budgets is smaller or close to 0.1% of GDP in the scenarios implying smaller changes, while it reaches 0.4% of GDP in a few cases where minimum wages are increased to 60% of the median wage (in Estonia, Germany, Greece, the Netherlands) or 50% of the average wage (in the Netherlands, Poland, Romania).[171]

The strengthening of enforcement of minimum wage rules may have direct costs for public administrations, but it may also result in increased revenue. Increased costs are involved if the improvements are based on increased staff and other resources, while increased wages and reduced undeclared work are expected to result in increased revenues in labour taxes and social security contributions.

The initiative is expected to bring some costs to the public authorities, however, it is not possible to quantify the magnitude of these costs. Such costs include small one-off costs that could arise in the case changes would be required to the current minimum wage legislation or to the legal framework on collective bargaining or the legal framework on enforcement, and respective small one-off costs of familiarisation with the new legislations. In addition, compliance costs may arise in case Member States would be required to take measures to ensure the timely and effective involvement of social partners in minimum wage setting and updating. In particular, these costs would be higher in case Member States would be required to establish new consultative bodies. Moreover, Member States could incur costs arising from promoting capacity building activities for social partners, the magnitude of which will depend on the amount of funds that Member States will choose to dedicate. Finally, costs may arise from monitoring and data collection mechanisms, which will depend on the changes that would be required to the current systems while additional costs could be envisaged due to the implementation of enforcement provisions and in particular from strengthening the enforcement of statutory minimum wages and wages set in collective agreements, and ensuring compliance in public procurement with wages set in collective agreements and with statutory minimum wages.

6.2.3 Impacts of the individual packages on Member States where minimum wage protection is provided by collective agreements

While there are differences between the packages regarding their social impacts on these Member States, their economic impacts are expected to be small. While Package A is expected to have the most significant impact on the collective bargaining systems due to the use of administrative extensions, the packages are not expected to have a significant economic impact at the aggregate level on these Member States.

However, as mentioned above, **some economic costs can be expected under all packages arising from the provisions of enforcement, monitoring and data**

[171] For more information, see Annex A12.8.

collection. In particular, both strengthening the enforcement of wage clauses in collective agreements and ensuring compliance in public procurement with wages set by collective agreements would possibly require increasing the capacity of the current enforcement mechanisms. However, the magnitude of these costs would depend on the adjustments that would be required to the current system. Furthermore, additional costs could be expected from the provision on monitoring and data collection given the current significant challenges which exist in this domain in most of the Member States where minimum wage protection is provided by collective agreements (see Annex A4.6 for details on data issues).

6.2.4 Impacts of the individual packages on Member States with statutory minimum wages

Economic impacts of increased minimum wage levels are expected to be proportional to their social benefits. This is because an increase in beneficiaries' wages means increased labour cost for firms. This cost may be shared between employers (in the form of reduced profits) and consumers (in the form of higher prices) but this does not loosen the close link between social benefits and economic costs. For this reason, economic costs are expected to be largest for Package B, which is expected to have the largest social benefit, followed by Package C and Package A (medium impacts).

At the same time, differences in governance aspects of minimum wage setting frameworks imply additional differences in economic costs, which loosen this proportional relationship. Package A brings additional benefits in terms of an improved business environment because of the high collective bargaining coverage, as well as the strong and decisive involvement of the social partners in both the minimum wage setting and updating and in enforcement. However, the bipartite and tripartite decision-making bodies involve economic costs related to the possibility that, in some cases, agreement may be difficult or impossible to reach. This could reduce the benefits of such an arrangement for the predictability of minimum wage setting.

Package B would improve the business environment both by a clearer and more stable framework and a stronger involvement of social partners and sufficient flexibility to take into account economic conditions. Criteria for setting the minimum wage, including indicators and indicative reference values related to adequacy make it easier for workers and firms to understand and anticipate minimum wage setting, even though the updates do not follow an automatic rule. The involvement of social partners is strengthened and all information is brought to the attention of the decision-makers and the public, but updates do not depend on whether a consensus can be reached among all stakeholders. Most importantly, this package includes sufficient flexibility to allow economic conditions to be taken into account. This allows Member States to take a more gradual approach to reach adequacy targets if the economic situation or considerations related to impacts on some sectors, regions or SMEs justify this. Thus, this package ensures that economic costs remain low as compared to the social benefits.

Package C, and the automatic indexation in particular combined with the impact of indicative reference values on adequacy, could imply additional economic costs because of its lack of flexibility. Automatic indexation systems make it easy for the public to understand and anticipate minimum wage updates, but may not be sufficiently flexible under some circumstances. This is because automatic rules cannot take into account all economic and social circumstances, which may become relevant under some circumstances, as this would make any rule too complex. For this reason, while indexation systems are, by definition, the most predictable among the systems, they may cause disadvantages for the business environment under some circumstances.

While increased minimum wages generally improve public budgets, the various packages may involve some costs of smaller magnitude for the government. As explained above, direct costs may be involved related to the capacity building of social partners (in all Packages), for the setting up of bipartite or tripartite bodies (for Package A) as well as one-off costs related to the adjustment of existing rules to comply with the initiative.

Finally, similarly to the case of Member States where minimum wage protection is provided by collective agreements, **some negative economic impacts can be expected under all packages arising from the provisions of enforcement, monitoring and data collection**. In particular, strengthening the enforcement of statutory minimum wages and wages set in collective agreements and ensuring compliance in public procurement with wages set by collective agreements and statutory minimum wages would possibly require increasing the capacity of the current enforcement mechanisms. However, the magnitude of these costs would depend on the adjustments that would be required to the current system. At the same time, the costs arising from the provision on monitoring and data collection are expected to be smaller than in the case of Member States where minimum wage protection is provided by collective agreements given that the challenge is smaller in Member States with statutory minimum wages. Nevertheless, data gaps still exist, especially regarding the share of non-covered workers or the share of workers affected by specific variations in or deductions from minimum wages.

Box 2: Economic impacts of various indicative reference values in Packages B and C

Higher reference values have higher economic costs for firms and consumers. Social benefits in terms of higher wages directly translate into increased labour costs for firms. At the highest reference values, the overall increase in the wage bill is about 1% at the EU level, which translates to about EUR 51-53 billion of total economic cost for consumers and firms. The increase of the wage bill is about 0.4% at intermediate reference values (translating into about EUR 20-22 billion of economic cost) while the lower reference values imply smaller increases.[172] As the economic costs are broadly proportional to the social costs, the incidence of the costs by Member States can be inferred from Graph A12.4 in Annex A12.1.

Most of this cost is borne by consumers in terms of higher prices, while a smaller share is borne by firms. According to a recent estimate, consumers bear about 75% of the cost in the form of higher prices, while firms bear about 25% of the cost in the form of lower profits.[173]

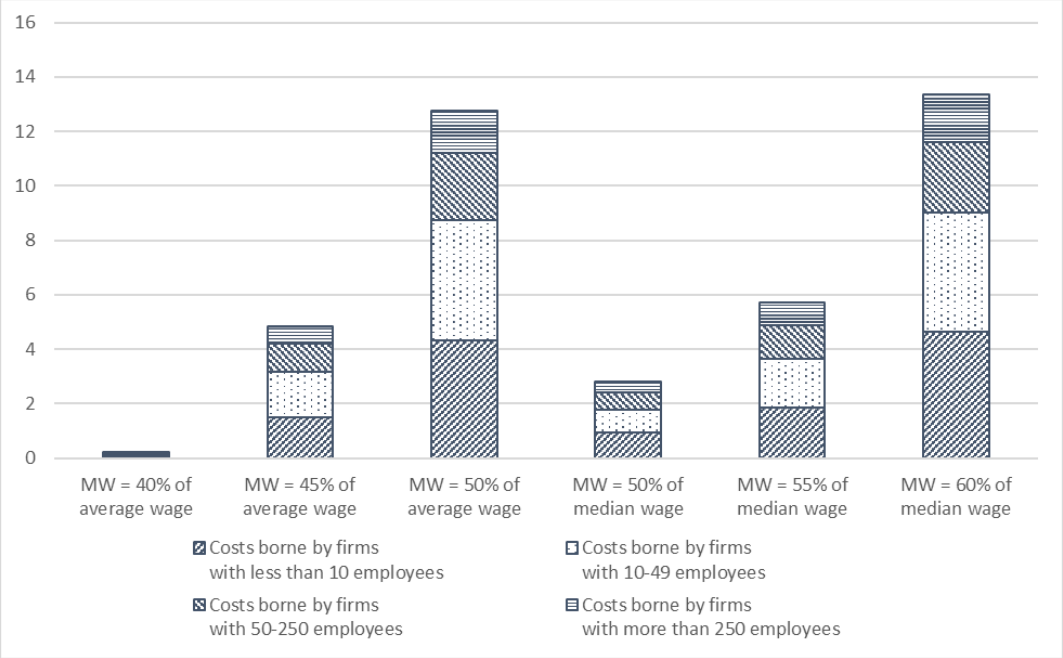
About 85-87% of the increased labour cost in the EU is expected to affect SMEs (employing less than 250 workers) based on their share in the employment of minimum wage earners, which exceeds SMEs' two-thirds share in overall employment.[174] About two-thirds of the increased labour costs associated with higher statutory minimum wages are expected to affect micro and small enterprises (employing less than 50 employees), divided almost equally between both categories. An additional 20% of the costs would affect medium-sized firms. The remaining 13-15% of the costs is expected to fall on large enterprises (see Graph 6). This corresponds to the share of these categories of firms in the employment of minimum wage earners in the countries affected by various scenarios. The additional annual costs for SMEs are estimated to be about EUR 4-5 billion if Member States increase their statutory minimum wages to the intermediate reference values (55% of the median wage or 45% of the average wage), while the they could be about EUR 11-12 billion of Member States increase their statutory minimum wages to the highest reference values (60% of the median wage or 50% of the average wage). Finally, annual costs to SMEs could be close to EUR 2.5 billion if Member States increased their minimum wages to 50% of the median wage, while costs would be very small based on a reference value of 40% of the average wage.

[172] The estimated increase in the EU wage bill is about 0.2% with all statutory minimum wage, translating to about EUR 11 billion at 50% of the median wage, while the increase is 0.01% at 40% of the average wage.

[173] This figure is based on the estimation of Harasztosi, P. and A. Lindner (2019): "Who pays for the minimum wage?" American Economic Review, Vol. 109(8): 2693–2727. Since most of these consumers are not minimum wage earners, the minimum wage has a clear redistributive effect.

[174] See Annex A12.12, for more details, on the division of total costs by firm size. The share of minimum wage earners by Member State and firm size is estimated from EU-SILC, as shown in Annex A7.2.

Graph 6: Breakdown of annual costs for firms by firm size, scenarios of compliance with various indicative reference values, billion EUR



Note: Calculations based on Euromod simulations conducted by the European Commission, Joint Research Centre.

Very high reference values may increase the risks in terms of economic impacts, which are not taken into account in the simulations. In addition, the highest reference value involves significant risk in terms of implementation. Risks related to employment and economic impacts related to the highest reference values (60% of the median wage or 50% of the average wage) are likely to lead some Member States towards non-compliance.

6.3 Impacts on fundamental rights

6.3.1 Impacts of all packages

Adequate wages and strengthened collective bargaining also support gender equality and help reduce the gender pay gap.[175] This is because a majority of minimum wage earners are women. Research into the distributive function of minimum wages illustrates that there is a link between the level of minimum wages and positive pay equity effects: "countries with higher minimum wages tend to have smaller shares of low wage employment, more compressed wage structure (in the bottom half of the

[175] Blau F.D. and Kahn L. M., "Understanding international differences in the gender pay gap", Working Paper 8200, National Bureau of Economic Research, April 2001.

distribution) and better indicators of pay equity".[176] The finding that improved minimum wages reduce the gender pay gap is confirmed by Euromod simulations prepared for this impact assessment. In particular, the reduction in the gender pay gap is significant in a majority of countries (reaching 10% under some scenarios), including in some EU countries where the gap in average wages between men and women is high (e.g., Czechia, Latvia, Germany).[177] Strengthened enforcement would also contribute to supporting gender equality and equal pay for equal work.[178]

6.3.2 Impacts of the individual packages

All packages are expected to reduce the gender pay gap through their impact on minimum wages. As the impact on minimum wage levels is expected to be strongest in the case of packages B and C, these packages are expected to have the strongest impact of the gender pay gap.

6.4 Comparing the policy packages

In this section, the policy packages are compared against the core criteria of effectiveness, efficiency and coherence. Effectiveness refers to the extent that the packages help achieve the social objectives of the initiative. Efficiency, in turn, refers to the ratio of these benefits to the associated costs. Overwhelmingly, these costs are economic costs for firms and consumers, as well as possible costs for workers in terms of a reduction in employment. Other types of costs, e.g. administrative costs, are of overall small magnitude as compared to these. The key results are presented in Table 2, based on the assessment of benefits and costs discussed in the impact sections.

Table 2: Comparison of policy packages

	Baseline	***Package A***	***Package B***	***Package C***
Effectiveness (meeting objectives)	0	++	+++	+++
Adequacy	0	++	+++	+++
Coverage	0	+++	++	++
Efficiency	0	+++	+++	++
Coherence *[incl. fundamental rights]*	0	++	+++	+++

Notes: For the purpose of comparing the impacts of the packages with the baseline scenario, all criteria have equal weight and a seven-stage qualitative grading scale is used: significant positive impact/gains (+++), medium (++), small (+), no impact (0), small negative impact/cost (-), medium (--), significant (---).

[176] Grimshaw, D. and Rubery, J. (2013) "The distributive function of a minimum wage: First- and second-order pay equity effects", in Grimshaw, D. (ed.), Minimum wages, pay equity and comparative industrial relations, New York, London: Routledge, 81-111.

[177] See Annex A12.1 for detailed results.

[178] Research has found a reduction in the gender wage gap at the bottom of the distribution in Ireland. However, the same study did not find a reduced gender gap in the United Kingdom. The authors suggest that this is due to non-compliance with the minimum wage legislation. See: Bargain, O., Doorley, K., van Kerm, Ph., (2016): "Minimum wages and the gender gap in pay. Evidence from the UK and Ireland", LISER Working Paper Series 2016-02, LISER.

6.4.1 Effectiveness

Package B would have the most significant positive effectiveness. Most importantly, together with Package C, it is the most effective to guide national frameworks to set statutory minimum wages because of the inclusion of indicators and indicative reference values of minimum wage adequacy. Package B complements this with ensuring that clear and stable criteria to guide updates of statutory minimum wages are in place, as well as a strengthened participation of social partners as compared to the baseline. Strengthened collective bargaining and enforcement contribute to the effectiveness of the package both in terms of adequacy (in Member States with both types of systems) and coverage in Member States relying on collective bargaining to set minimum wages. The precondition of the 70% collective bargaining coverage rate to trigger action to strengthen collective bargaining would help to counter its declining trend and thus result in a medium effectiveness to increase coverage.

Higher reference values are more effective in increasing the adequacy of statutory minimum wages. In particular, the highest reference values are associated with very significant social benefits, intermediate reference values are associated with significant social benefits, while the lowest reference values are associated with moderate social benefits.[179] Reference values relative to the median versus average wage somewhat differ in terms of the group of countries affected (see Box 1 in Section 6.1.4).

Package C would have also high effectiveness. This package combines indicators and indicative reference values of minimum wage adequacy with automatic indexation, instead of a framework based on criteria and more discretion as it is the case of Package B. Furthermore, as in the case of Package B, strengthened collective bargaining and enforcement contribute to the effectiveness of the package both in terms of adequacy (in Member States with both types of systems) and coverage in Member States relying on collective bargaining to set minimum wages. The precondition of the 70% collective bargaining coverage rate to trigger action to strengthen collective bargaining would help to counter its declining trend and thus, it would also result in a medium effectiveness to increase coverage.

Package A would have intermediate effectiveness. The measure providing for bipartite or tripartite decision-making bodies, in combination with national benchmarks of minimum wage adequacy, could be effective in improving the adequacy in Member States with statutory systems. However, such a setting also involves risks. It may take disproportionally long to reach agreements about minimum wage updating in such a setting. The effectiveness of such a system may also depend on the rules of update in case no decision is reached in the bipartite or tripartite bodies.

[179] For a more detailed comparison between the reference values, see Annex A12.9 and Annexes 12.1 and 12.2 for detailed, country-specific simulation results.

6.4.2 Efficiency

In most cases, economic costs, which are the main costs associated with the packages, are expected to be broadly proportional to social benefits. This is because wage increases are direct benefits for workers while they are direct costs for firms. Differences between the packages regarding efficiency arise because some packages involve costs related to additional risks to employment or the competitiveness of particular sectors. Competitiveness concerns may be more significant in Member States in which many minimum wage earners are employed in in manufacturing or agriculture (e.g. in Bulgaria, Croatia, and Romania).[180] This subsection explains how these costs affect the efficiency score of the three packages. The ranking of packages in terms of efficiency presented in this section is mainly based on the impacts in Member States with statutory minimum wages, as the packages are similar in terms of their efficiency in Member States where minimum wage protection is provided by collective agreements.

Package B has a very high efficiency as it combines the most significant social impacts with low risks in terms of economic costs. While indicative reference values and clear criteria for the setting and updating statutory minimum wages are expected, along with other measures in the package, to strengthen the adequacy of minimum wages, the package includes sufficient flexibility for Member States to take into account economic impacts and possible effects on specific regions, sectors and SMEs under the particular circumstances. This means that they can take a more gradual approach if the risks in terms of costs are perceived to be high, which limits risks related to economic costs.

Various reference values of minimum wage adequacy can be similar in terms of efficiency. While the ratio of the minimum wage to the median wage may be a more accurate indicator of wage compression at low wages than the ratio to the average wage, it is based on a more complex statistical concept and may be harder to communicate for the wider public. Both can provide useful guidance for minimum wage setting.[181] Especially since Member States have sufficient flexibility to take into account all relevant factors of minimum-wage setting, including economic costs and impacts on firms and competitiveness, all reference values can lead to an efficient ratio of social benefits and economic costs. This is true for the lowest, intermediate, and highest reference values. At the same time, the highest reference values (60% of the median wage or 50% of the average) may involve higher risks in terms of employment and economic impacts, and some risks in terms of implementation.

[180] See Graph A7.1 in Annex A7.1 and Graph A7.6 in Annex A7.2. The graphs are based on EU-SILC data which do not allow a differentiation between medium-sized and large firms. Combining these data with information with EU-SES, a similar picture emerges for all SMEs: these firms (employing up to 250 employees) employ about two-thirds of all workers in the EU, and almost 90% of all minimum wage earners.

[181] For a more detailed comparison between indicators and reference values, see Annex A12.9.

While Package A is less effective than Package B, it is similarly efficient. This is because economic and social costs are expected to be broadly proportional to social benefits. A statutory minimum wage setting mechanism driven by a bipartite or tripartite decision making body does not involve additional risks in terms of these costs.

Package C has intermediate efficiency. While it is expected to be very effective in reaching the social goals of the initiative in Member States with statutory minimum wages, it involves economic costs related to risks in terms of employment and competitiveness impacts. Particularly in bad economic times, such as times of high unemployment, automatic indexation may be less able to take into account the economic and employment concerns than the more flexible approach based on criteria in Package B. In particular, automatic indexation systems have been found to have difficulties in taking into account the economic circumstances in the wake of the financial crisis of 2008.[182] These considerations are particularly relevant in the current economic context strongly affected by the Covid-19 pandemic. Evidence also suggests that employment impacts of minimum wage increases may be larger under automatic indexation.[183] This inflexibility can result in disproportional economic costs under some circumstances.

6.4.3 Coherence

In terms of coherence, all the packages considered under this initiative are coherent with the social goals of the EU, in so far as they contribute to the Treaty-based goals of promoting employment and improved living and working conditions (Article 151 TFEU), and to the implementation of the European Pillar of Social Rights, notably of the principles on wages (Principle 6), on social dialogue and involvement of workers (Principle 8), as well as on gender equality (Principle 2). They also address the rights set out in the Charter of Fundamental Rights of the EU in relation to the right of workers to fair and just working conditions (Article 31). The options are also coherent with the European Semester and with the Country Specific Recommendations issued to Member States during the last years (see also Annex A12.11). Furthermore, all packages are also coherent with the newly launched Commission initiative on collective bargaining for the self-employed.[184] The initiative seeks to ensure that conditions can be improved through collective agreements not only for employees, but also for those self-employed who need protection.

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[182] The European Commission has addressed Country-Specific Recommendations to Belgium, France, Luxembourg, Malta and Slovenia related to wage indexation systems, calling attention to competitiveness concerns or a need to take into account productivity developments. See Annex A12.11 for more detail.

[183] See Congressional Budget Office (2019): "The Effects on Employment and Family Income of Increasing the Federal Minimum Wage", based on studies by Isaac Sorkin, "Are There Long-Run Effects of the Minimum Wage?" Review of Economic Dynamics, vol. 18, no. 2 (April 2015), pp. 306–333, https:// doi.org/10.1016/j.red.2014.05.003; and Peter Brummund and Michael R. Strain. "Does Employment Respond Differently to Minimum Wage Increases in the Presence of Inflation Indexing?" Journal of Human Resources (forthcoming), http://dx.doi.org/10.3368/jhr.55.2.1216.8404R2.

[184] The initiative was launched on 30 June 2020. See: https://ec.europa.eu/commission/presscorner/detail/en/IP_20_1237.

The EU promotes the international rules and standards set within the frames of the International Labour Organisation (ILO), in particular the Minimum wage Fixing Convention (C 131) and the Collective Bargaining Convention (C 154), which are the most relevant for this initiative. The EU supports the implementation of these standards and this initiative would set the overall level of protection above the ILO standards.

6.4.4 Impacts on stakeholders

Benefits for workers will be highest from Package B and Package C. These packages are more effective for improving the adequacy and coverage of minimum wages as compared to Package A (less effective in improving adequacy). Across all three packages, these benefits are expected to outweigh potential negative employment impacts as well as negative impacts on consumers through increased prices.

Impacts on businesses in the form of higher wage costs are broadly proportional to social benefits. This means that costs for firms are expected to be highest for packages B and C, and lower for package A. On the other hand, benefits for businesses, including SMEs, in terms of reduced uncertainties and improved business environment will also be the strongest in Package B and C due to clear and stable frameworks to set statutory minimum wages, followed by Package A. At the same time, Package C involves the risk that it is less able to take into account economic and employment concerns under adverse economic circumstances than Package B. This could lead to additional costs for firms under Package C.

Member States' administrations will face the same financial burden throughout all packages caused by strengthened enforcement and monitoring. In addition, under all packages, some costs are also associated with capacity building for social partners. This is the case both for Member States with collectively bargained and those with statutory minimum wages. For Member States with statutory minimum wages, recurrent cost for consultation activities derives from all packages. Some additional one-off cost will come from Packages A to develop a benchmark for decent living standards. Some financial burden is caused by Packages B and C for the assessment of adequacy using indicative indicators and reference values. Nevertheless, higher minimum wages are associated with higher revenues from income taxes and social security contributions. This impact is expected to more than counterbalance possible administrative costs related to the initiative.

6.4.5 Impacts on national industrial relations systems

Package A will have a significant impact on industrial relations systems by introducing extension mechanisms of collective bargaining. While this would be done with the agreement of social partners, it would imply significant changes in industrial relations systems of many Member States which currently do not use administrative extensions, irrespective of their minimum wage setting system. Such extensions may also

reduce the incentives of workers to join unions which would have significant impacts in a number of countries, including notably Denmark and Sweden.

Package C would have a strong impact on industrial relations systems by introducing automatic indexation of statutory minimum wages. This would have a significant impact on the industrial relations systems in many Member States with statutory national minimum wages. It would reduce significantly the scope of social partners' influence on minimum wages and on wage developments in general. This can in turn lead to a decrease in union density and in the coverage of collective agreements.

Package B, in contrast, is a package that fully respects existing industrial relations systems in the EU. While it includes measures to strengthen collective bargaining in Member States and encourages an increase in collective bargaining coverage to 70%, and effective consultation of social partners for setting and updating statutory minimum wages, it does not imply changes in the systems of either Member States where minimum wage protection is provided by collective agreements or those with statutory national minimum wages.

7 THE PREFERRED PACKAGE

The preferred option is policy package B. As indicators and indicative reference values for benchmarking the adequacy of statutory minimum wages, it includes the options of 55% or 60% of the median wage, or 45% or 50% of the average wage, or a combination of these.[185] This package best balances achieving the policy objectives with the related costs, and allows reaching the policy objectives in a proportionate manner. It respects well-established national arrangements and leaves room for discretion of Member States and social partners.

As a consequence of this package, minimum wages would increase in about half to two-thirds of the Member States. A large number of workers, in particular from vulnerable groups including women, would be entitled to more adequate minimum wages (about 11-12 million in the case of compliance with the intermediate reference value, while 22-24 million in the case of compliance with the highest reference values). Wage increases of beneficiaries would reach 20% in a few countries, but the increases of the total EU wage bill are expected to be moderate (about 0.4% or EUR 20-23 billion for the intermediate reference values or 1% or EUR 51-53 billion for the highest reference values, in the case of full implementation). Employment effects would remain below 0.8% in most cases for high reference values, but would reach 1% in Greece, Estonia and Ireland (in the case of the highest reference values). Thus, the costs are commensurate with the objective to be achieved by the initiative. The preferred package includes

[185] In particular, a combination of both intermediate reference values (55% of median wage and 45% of average wage) or both of the highest reference values (60% of median wage and 50% of average wage) is possible. The comparison between the social and economic impacts of various reference values is summarised in Annex 12.9.

sufficient flexibility to allow Member States to determine the pace of improving the adequacy of minimum wages in light of economic conditions and risks, including to specific sectors, regions and SMEs.

Strengthening and increasing the coverage of collective bargaining will bring benefits to workers because it will lead to a larger number of sectors, and thus more workers, being covered by minimum wages in Member States with collectively bargained systems. It may also result in more wages set in collective agreements on top of statutory minimum wages. This will entail modest one-off administrative costs for putting in place a regulatory framework or enabling conditions for collective bargaining on wages, as well as some direct cost for administrations and social partners for capacity building. For businesses, increased costs related to strengthened collective bargaining and higher wages set in collective agreements are partly counterbalanced by benefits in terms of employee motivation and engagement, as well as other possible measures in collective agreements which are beneficial for the operation of companies.

Adjusting national frameworks to set statutory minimum wages, which foresee an enhanced involvement of social partners, will ensure clearer and more stable criteria. A stronger role of social partners will lead to a more predictable and thus favourable business environment. This will entail some one-off administrative costs for the legislative process and modest yearly cost for enhanced involvement of social partners in updating the minimum wages.

The introduction of an indicative reference value (e.g. 55% or 60% of the median wage or 45% or 50% of the average wage), along with the limitation of variations, will create substantial benefits for minimum wage earners and vulnerable groups which are currently not entitled to minimum wages, by improving their working conditions. It is expected that firms will benefit in terms of increased productivity as a result of higher motivation and engagement of workers. Those measures will moderately increase wage costs for companies in particular in the retail and hospitality sectors and in Member States in which statutory minimum wages start from a comparatively low level.

Strengthening enforcement and ensuring better compliance will contribute to more adequate wages actually paid to all who are entitled to it. This brings benefits to workers, to companies by ensuring fair competition and, via higher tax and contribution revenues, public budgets. It will imply some direct cost for public administrations due to more frequent inspections.

Finally, with respect to subsidiarity and proportionality considerations, the preferred package only sets minimum standards for wage setting, thus ensuring that the degree of intervention will be kept to the minimum necessary in order to reach the objectives of the initiative. The package respects well-established national traditions in minimum wage setting. In particular, it fully respects the competences of Member State and social partners to determine the detailed modalities of their minimum wage setting systems, and

the level of their minimum wages. Therefore, it allows for minimum wages to continue to be set either through collective agreements or through legal provisions, in full respect of national competences and social partners' contractual freedom. Furthermore, it leaves room for considering national economic circumstances, besides adequacy considerations, and the specificities of their minimum wage setting systems, thus providing for flexibility to adjust to the economic cycle and to specific conditions in individual Member States. Therefore, the proposal does not go beyond what is necessary to achieve the policy objectives, thus the principle of proportionality is respected considering the size and nature of the identified problems. By striking a balance between views expressed in the formal social partner consultation and taking into consideration the specificities and heterogeneity of minimum wage setting systems, the preferred option represents a realistic and proportionate set of measures commensurate with the ambitions of the European Pillar of Social Rights.[186]

8 THE CHOICE OF LEGAL INSTRUMENT

8.1 Legal options

The legal instruments considered for the initiative are a Council Recommendation and a Directive. The possibility of an increased focus on minimum wages in the framework of existing tools, notably the European Semester, is also considered. A careful choice of the level of detail of the provisions would ensure that the proposal does not go beyond the minimum that is necessary to achieve the objectives of the proposal, irrespective of the specific instrument chosen. Subsidiarity is thus fully respected and it does not provide an argument for determining the choice between the different legal options since it is compatible with the considered legal instruments.

The initiative would be based on Article 153 (1) (b) TFEU on working conditions. It would respect the limitations imposed by Article 153(5) TFEU, which does not allow the EU to intervene directly on the level of pay, so as not to interfere with the competence of Member States and autonomy of social partners in this field. Nevertheless, and in line with the interpretation of the European Court of Justice, it does not prevent the EU to take measures under Article 153 (1) involving any sort of link with pay. Both binding and non-binding instruments are possible under this Article. The EU instruments under consideration are explained in more detail as follows.

EU Directive

Article 153 (2) TFEU provides the possibility of adopting a **Directive in the area of 'working conditions'** laying down minimum requirements for implementation by

[186] For more details on costs and benefits for the different stakeholders, please see Annex 3.

Member States.[187] In line with Article 288 TFEU, a Directive would give certainty about the binding requirements to be applied by Member States. This instrument would thus have a high degree of effectiveness in reaching the objectives of the initiative. To this end, the proposal would contain a set of minimum requirements and procedural obligations to be complied with. The Directive would leave room for Member States to decide on the way to implement them, and would not take away the freedom of Member States and social partners to set the level of minimum wages. Furthermore, the Directive would not affect the bargaining freedom of social partners.

A Member State could entrust social partners, at their joint request, with the implementation of the Directive, in line with Article 153(3) TFEU. In this case, the Member State would need to ensure that social partners introduce the necessary measures by the transposition date that would be indicated in the Directive. The Directive would provide for a framework for monitoring its implementation.

Council Recommendation

Alternatively**, a Council Recommendation could be considered,** inviting Member States to set the conditions for ensuring adequate minimum wages that protect all workers in the Union. A Recommendation would provide for policy guidance and a common policy framework at EU level, without setting specific obligatory requirements. As in the case of a Directive, it would not take away the freedom of Member States and social partners to set the level of minimum wages. The common set of principles and criteria contained in the Recommendation would therefore provide a basis for action by all Member States with a view to achieving fair minimum wages across the EU.

Envisaged tools for monitoring the implementation of this non-binding instrument might include the use of a benchmarking framework with suitable indicators, even if no reference values are set, the exchange of good practices, and joint work with Member States and social partners on the development of appropriate statistical and monitoring tools. A dedicated benchmarking framework, integrated in the European Semester, could be a privileged tool for the operationalisation of some elements of the initiative.

During the second stage consultation with the social partners, from the workers' organisations side, the ETUC and CESI called on the European Commission to propose an EU Framework Directive while CEC European Managers considered a Council Recommendation as the most effective tool. Most employers' organisations advocated that the EU has no competence to introduce a legal instrument, however, several organisations stated that a Council Recommendation could be considered, provided that

[187] Art 153(2) (b) also states that "*Such directives shall avoid imposing administrative, financial and legal constraints in a way which would hold back the creation and development of small and medium-sized undertakings*".

the autonomy of social partners and freedom of collective bargaining are fully respected and well-functioning national wage setting mechanisms are not undermined.

Combination of a Directive and a Recommendation

This would be an **intermediate solution** which would allow to set binding objectives, while being more specific and targeted on certain aspects of the initiative. The Directive could lay down the framework rules for having access to collective bargaining or setting and updating statutory minimum wages. The complementary Recommendation could give more specific, non-binding guidance on measures to be taken to strengthen the capacity of social partners and to facilitate collective bargaining.

8.2 Preferred option

The **preferred instrument would be a Directive** as this is regarded as the most suitable to deliver on the objectives of the initiative and is also considered to be the most proportionate and effective option.

A Directive provides binding minimum requirements, while it leaves room for the Member States to define the method and form of intervention to achieve the objectives. Article 151 TFEU calls on the Union to take into account the diverse forms of national practices when implementing measures in the field of working conditions. Article 153(2) TFEU does allow setting minimum requirements for gradual implementation by the means of directives in fields such as working conditions. The EU instrument would thus set minimum rules and procedures making national systems capable of achieving the common policy objectives while respecting the particular characteristics and modalities of national systems. This can be best achieved by the means of a Directive. A Directive would allow achieving an equal level of overall protection against in-work poverty for workers across the EU.

A Directive would better serve the objectives of this proposal due to its binding nature and its better enforceability. The proper transposition of the Directive into national law can be ensured by the Commission. Moreover, the Directive can be enforced at the national level in line with the practices of Member States. A Directive would also bring more even and more predictable implementation which would contribute to the level playing field in the Single Market. Predictable implementation and enforceability would also address non-compliance issues with the national frameworks more efficiently, thus making a Directive a more adequate instrument for the initiative.

The adoption of a Council Recommendation would be in line with the TFEU; however, it would not deliver the same level of protection for workers as a Directive, due to its non-binding nature. Moreover, the key added value of having more specific and non-binding guidance would fade, if it led to more selective implementation and diverse results in the Member States, making a Recommendation a less effective tool to

promote collective bargaining and to achieve adequate and regularly updated minimum wages. More specific rules would also entail deeper interference with national frameworks. Therefore, a Council Recommendation would not effectively address the issue of inadequate minimum wages due to non-compliance with the already existing frameworks, leaving those affected by non-compliant behaviour without remedies and compensation against infringements.

Lastly, a combination of a Directive and a Recommendation poses risks to proportionality and subsidiarity. Adopting a Recommendation together with a Directive would unnecessarily inflate the EU guidance and its detail. It could also increase the risk that important binding elements – necessary to achieve the desired objectives - would become subject to political bargaining and be transferred to the proposed complementary Recommendation instead of the Directive. Therefore, the combination of instruments could decrease the overall level of protection of the initiative.

9 HOW WILL ACTUAL IMPACTS BE MONITORED AND EVALUATED?

Progress towards achieving the objectives of the initiative will be monitored by a series of core indicators related to the objectives of the initiative. These and the related data sources are summarised in Annex 13. The monitoring framework will be subject to further adjustment according to the final legal and implementation requirements and timeline. To avoid putting additional administrative burden due to the collection of data or information for the purpose of monitoring, it relies as far as possible on established comparative (Eurostat, OECD) or national data sources. It also builds on the minimum wage benchmarking framework being developed by the European Commission and Member States.[188] This benchmarking framework proposes indicators to monitor outcomes, policy performance and policy levers related to the adequacy of minimum wage policies, but has not yet established quantitative thresholds for good performance. The Commission will evaluate the initiative 5 years after it enters into force in line with the Better Regulation Guidelines.

[188] For more detail, see Annex A12.11.

Annex 1 Procedural information

A1.1. Lead DG, Decide Planning/CWP references

The lead DG is DG EMPL, DG Employment, Social Affairs and Inclusion.

Agenda planning: PLAN/2019/6127; Work Programme reference: Policy Objective No.18: Social Europe, Initiative: Fair minimum wages for workers in the EU (Articles 153(1) b, 153(2) and 154 TFEU[189]

A1.2. Organisation and timing

The Impact Assessment was assessed by the Interservice Steering Group (ISSG) (present DGs SG, ECFIN, GROW, JRC, LS, ESTAT, RTD, TAXUD) on 1 September 2020. It was then assessed via a fast-track Interservice Consultation (ISC) meeting on 19 October 2020.

The Analytical Document accompanying the second phase consultation of social partners on which the Impact Assessment is based, together with the second stage consultation document, was assessed by the ISSG on 31 March 2020 (present DGs SG, ECFIN, GROW, ESTAT, SJ, JRC, TAXUD, RTD) and adopted following ISC (DGs consulted ECFIN, ESTAT, GROW, HOME, JRC, JUST, MOVE, SANTE, SG, SJ, TAXUD).

The first stage consultation document were assessed by the Interservice Steering Group on 9 September 2019 (present DGs SG, ECFIN, GROW, ESTAT, SJ, JRC, TAXUD) and adopted following ISC (DGs consulted ECFIN, ESTAT, GROW, HOME, JRC, JUST, MOVE, SANTE, SG, SJ, TAXUD).

A1.3. Consultation of the RSB

The Impact Assessment report was reviewed by the Regulatory Scrutiny Board (RSB) on 30 September 2020. The RSB first delivered a negative opinion and after examining the resubmitted version (submitted on 6 October 2002) delivered a positive opinion with reservation on 14 October 2020. The revisions introduced in response to the RSB opinion are summarised in the tables below.

[189] COM(2020) 440 final, ANNEXES 1 to 2: ANNEX to the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions Commission Adjusted Commission Work Programme 2020.

Table A 1.1: Revisions introduced in response to the RSB

(a) **First RSB opinion**

RSB main reservations	**Changes done in the IA**
(1) The report should systematically distinguish between the two types of minimum wage setting systems that exist in Member States.	All throughout the document, the report distinguishes between both types of minimum wage setting systems. In particular, the sections on objectives (Section 4), options (Section 5) and impacts (Section 6) have been reorganised to discuss both systems separately.
(2) The report should be clearer on how it uses both absolute and relative income indicators to show the inadequacy of minimum wages and poverty risks.	A clear explanation of the close link between both aspects of adequacy has been introduced in the first two paragraphs of Section 2.1.1 in the revised version of the IA. In addition, a paragraph has been added in the same section to summarise the assessment of adequacy based on a combination of indicators.
The problem description should attribute problems and problem drivers to the two types of minimum wage setting systems.	A new section 2.3 in the revised version clearly differentiates between the mechanisms through which internal drivers affect the problem in each of the minimum wage setting systems. The subsection also includes a diagrammatic overview of these links.
In explaining how the problem will evolve, the report should focus on how external drivers of wages (trade and migration, technological change and the Covid-19 crisis) amplify the internal drivers of inadequate minimum wages.	In Section 2.7 on how the problem is likely to evolve, the aspect of the interaction between external and internal drivers has been strengthened. External drivers are in particular expected to exacerbate issues related to the internal drivers of collective bargaining and enforcement. In addition, the impact of the Covid-19 crisis on the evolution of the problem has been further analysed.

(3) The main document should include more evidence on how the internal problem drivers have led to inadequate minimum wages. It should for example illustrate how declining collective bargaining has induced lower absolute or relative minimum wages, or how an increase in variations and exemptions has more than temporarily reduced protection of low-income workers.	The problem section has been revised to demonstrate the links between internal drivers and inadequate minimum wages. In particular, passages have been added in Section 2.5.1 to illustrate how declining collective bargaining, and wage restraint in collective agreements, have led to lower minimum wages. In addition, more evidence has been added in Section 2.5.4 on the impact of youth minimum wages on the share of workers earning less than the regular minimum wage.
(4) The report should better justify why there is a need for horizontal EU intervention in an area where the problem is specific to a number of Member States. The report should better substantiate and explain why EU-level involvement through country specific recommendations would not suffice.	The report better justifies the need for horizontal EU intervention (Section 3). It better substantiates how the legislative initiative is in line with the legal basis and with the subsidiarity and proportionality principles. It also explains why the European Semester has not been sufficient to address the existing shortcomings in national minimum wage setting systems.
(5) In presenting the objectives, measures and their impacts, the report should explain whether and how they are relevant for the two different types of minimum wage setting systems. The options and impact analysis should follow the problem analysis in differentiating between these systems.	Section 4 on the objectives, Section 5 on the options and Section 6 on the impacts have been reorganised to discuss both minimum wage setting systems separately.
(6) The report should better explain the logic behind the composition of the options packages. It should justify why certain measures are included only in some packages. It should not design the indexation package to be ineffective by not including a measure to improve the adequacy of minimum wages. It should be specific how each measure would change practices across Member States.	The composition of the packages (Section 5) has been revised to ensure that all packages constitute realistic options. The rationale behind each package and their content has been clarified and the main measures under each of them have been identified. The implications of the preferred package for each Member State have been assessed by policy measure or type of measures.

(7) The impact analysis should better clarify which measures matter most for the success of the options packages and whether impacts depend on individual measures. The analysis should consider risks or possible indirect impacts of changing established wage-setting systems.	The impacts section has been strengthened to discuss possible impacts on wage setting systems and, more broadly, national industrial relations systems. A new section 6.4.5 compares the packages from this point of view. This section also identifies under each package the most relevant measures for achieving the objectives of the initiative.
(8) The report should clarify what role the criteria of effectiveness and efficiency have for the comparison of the options packages. For example, it is not obvious why the preferred package ranks highest in terms of efficiency. It is not clear how the higher wage cost is valued in comparison to lower administrative and compliance costs.	Section 6.4 on the comparison of options has been revised to make clearer the criteria of effectiveness and efficiency. The introduction clarifies the relative weight of economic and social costs versus (the less significant) administrative costs. The comparison of packages has also been adjusted based on their changed contents.
(9) The report should explore the unintended consequences of the preferred option on SMEs. It should clarify why they welcome a reduction in unfair competition through a legislative provision while requesting non-binding actions.	Section 6 has been strengthened by discussing unintended consequences on SMEs, in particular firm dynamics (Section 6.2.2), and by including calculations of costs for SMEs (Section 6.2.4, based on a new Annex A12.12). Direct costs estimates have been included in the SME test (Annex A12.13).
(10) The report should discuss the impact on major stakeholders when comparing options. The distributional effects on stakeholders should be summarised and added in Annex 3.	In the revised impact assessment, a new discussion has been added on impacts on major stakeholders in a separate section 6.4.4. In addition, distributional effects on stakeholders have been summarised and added in Annex 3.

(b) Second RSB opinion

RSB main reservations	Changes done in the IA
(1) The report provides additional discussion on the decline of collective bargaining on low wages in general. However, it should illustrate specifically how declining collective bargaining has induced inadequate minimum wages. It should be more precise in explaining how the relevance of absolute and relative minimum wage metrics changes with the shape of the wage distribution and the general wage level. The report could also be more explicit on the problems relating to compliance, enforcement and monitoring (under both wage setting systems).	The text has further clarified the decline in collective bargaining and its impact on low wages in section 2.5.1. In section 2.5.5, further information has been added on problems relating to compliance and enforcement, and the text now more clearly describes the challenges related to monitoring. Clarification were added in section 2.1.1 to explain the relevance of the absolute and relative minimum wage metrics Additional information was added to the report (section 2.5.5) to explain the problems relating to compliance, enforcement and monitoring (under both wage setting systems).
(2) To better link the problem analysis with the options, the report should be clearer on the specific objectives (i.e. to improve adequacy and increase the coverage of minimum wages) by specifying what success of the initiative would look like.	Text was added to section 4.2 clarifying that in terms of adequacy and coverage success translates into: -A minimum wage level at the preferred reference value -At least 70% collective bargaining coverage rate.
(3) The report should justify why some "not mutually exclusive" measures, which address the same objective, are part of some packages for countries with collective bargaining, but not of others. It should justify why the package with indexation of minimum wages does not include a measure on variations and exceptions or on reinforcing collective bargaining, which reduces its effectiveness. The report should clarify why all options packages contain the same measures for monitoring and enforcement. It should analyse whether some of these measures could be more effective or less costly.	The report was revised and now all packages include the "not mutually exclusive" measures which can individually or in combination contribute to addressing the challenges. In particular, the composition of Package C was revised to include Measure 1.3 on collective bargaining and Measure 4.1 on variations and deductions. The introductory text of section 5.6 has been adjusted and now it clarifies that given that these measures are not mutually exclusive and they can all, individually or in combination contribute to achieving the objectives through addressing different challenges, while their combination would reinforce the expected benefits. A similar explanation is provided in section 5.6.1

The report should better explain why certain reference values (for median wages, collective bargaining coverage) were chosen and whether they are relevant for both types of minimum wage setting systems.	(for both systems). Furthermore, text was added in sections 6.1.3 and 6.1.4 which presents in a more concise manner the expected positive impacts of these measures and to sections 6.2.3 and 6.2.4 presenting more concisely the expected costs of these measures (separately for the two systems). Regarding the adequacy, the IA does not express a preference for specific reference values, rather it presents a list of possible options. Regarding the collective bargaining coverage an explanation is provided in section 5.3 under Measure 1.3. The IA clearly indicates that the adequacy reference values are only relevant for MS with statutory minimum wages while the coverage reference value is relevant for both systems.
(4) The revised report clarifies better the magnitude of impact (including risks and unintended consequences) of some of the individual measures (e.g. strengthened collective bargaining, collective bargaining coverage ratio, automatic indexation). However, the report should clarify which measures matter most for the success of the options packages and whether impacts depend on individual measures.	The IA already identified in sections 6.1.3 and 6.1.4 which measures matter most for the success of the packages. Additional clarifications were added to this section, where necessary, to clarify whether, the impacts depend on individual measures or on the combination of the selected measures.
(5) The report analyses only the immediate effects of the option packages on minimum wages. It could do more to explore effects on unemployment and productivity. It could also expand on possible indirect effects like induced migration between Member States, and internal market effects due to differences in impacts on national export industries. Furthermore, the report could provide clearer indications of how costs and benefits would be distributed between (groups of) Member States.	A new passage has been added to Section 6.1.2 to discuss impacts on unemployment, while impacts on productivity are discussed in Section 6.2.2. In this section, the discussion of impacts on the internal market has been expanded based on a report submitted to the impact assessment by DG ECFIN. A discussion of impacts on migration (labour mobility) has been added to Section 6.1.2. The report emphasises, in Sections 6.1.2 (on employment impacts), 6.2.4 (on economic impacts), and 6.4.2 (on efficiency), among others, that economic and employment costs are expected to be broadly proportional to social benefits because wage increases are benefits for workers but costs for firms. The report also emphasises instances when there are risks that costs could be disproportional to

The report could present the expected changes in minimum wages by Member State for the suggested reference values. The report should provide greater clarity on costs for public authorities.	benefits. Estimations of these costs and benefits are calculated by Member State, for various scenarios in Annex A12.1. The IA presents and discusses in Annex 12.1 the implied minimum wage increases for various non-binding reference values in percentages. A table was added to this Annex indicating minimum wage levels corresponding to each non-binding reference value in all Member States with statutory minimum wages and the implied minimum wage increases for these reference values in nominal values in euro. A paragraph has been added to sections 6.2.1 and 6.2.2 (under impact on public budgets) on the expected costs for public authorities under both systems respectively.
(6) The report could do more to acknowledge risks for micro and small enterprises that are likely to be affected most by this initiative. The report should clarify why SMEs welcome a reduction in unfair competition through a legislative provision while requesting non-binding actions.	Section 6.2.2 has been further strengthened by discussing risks, based on the existing evidence base, which SMEs may find it harder to compete for workers after a minimum wage increase. The discussion of the existing evidence base and its limitations has also been made more explicit. Additional cost calculations have been included in Box 2, in Section 6.2.4. Section 2.6.2 now includes a direct quote from SMEUnited in which "unfair competition and social dumping on the labour market" is mentioned as "a key concern for SMEs". Furthermore, a direct quote form SMEUnited was added to Annex A12.12 (SME Test) providing more information on the arguments they raised.
(7) The report should integrate the economic impacts separately and more visibly into the comparison of options. It can do this either under the effectiveness analysis (as the economic impacts are part of the general objective) or by focussing the efficiency analysis more on the cost side.	A new introductory passage of Section 6.4.2 (on the comparison of packages related to efficiency) has been added to further clarify and give more visibility to the fundamental approach to the assessment of efficiency and the role economic costs play in it. The discussion emphasises that, in most cases, economic costs are proportional to social benefits because wage increases are direct benefits for workers but direct costs for firms. The report also emphasises

	instances when there are risks that costs could be disproportional to benefits. These risks significantly affect the "efficiency" of various packages because they affect the proportion of costs to benefits.
(8) The report should better substantiate the ranking of options. It should better align the discussion in the text with the effectiveness, efficiency and coherence ratings. When discussing the preferred option, it should treat all options in a coherent way. The revised report includes separate options packages for Member States where minimum wage protection is provided by collective agreements. It should include a specific comparison of these packages, resulting possibly in a preferred option for these Member States. In doing so, it should describe how well these packages deliver on the specific objectives.	Section 6.4 has been revised to align the discussion in the text with the ratings in Table 2. Options are treated in a coherent way. In the revised report, policy packages are indeed presented in a way so as to make clear their implications for countries with both minimum wage setting systems separately. Nevertheless, the component measures of various packages are not separable into two groups based on which system they refer to. This is because some measures (in the areas of collective bargaining and compliance) refer to both systems. Nevertheless, the revised report clarifies, in Section 6.4 on the comparison of packages, which impact is especially expected to be significant in which group of countries. An explicit comparison between packages is not made on dimensions on which the packages are identical (in particular, in the area of compliance and monitoring).

A1.4. Evidence, sources, quality and external expertise

The following expert advice has fed into the Impact Assessment:

- External studies commissioned from external experts:

- "Indexation of statutory minimum wage" by Diane Delaurens and Etienne Wasmer.
- "Effects of statutory minimum wages on small and medium-sized enterprises" by Attila Lindner, University College London.
- "Effects of collectively agreed minimum wages in the Nordic countries" by Per Skedinger, Research Institute of Industrial Economics (IFN).

- Three country reports requested from Eurofound on the setting and adequacy of minimum wages as well as related policy debates focusing, respectively, on Austria, Italy and Cyprus.

- A set of expert reports on the minimum wage setting systems of EU Member States (one expert report for each Member State) provided by the European Centre of Expertise (ECE).

- Simulations, within the framework of an existing contract, by the OECD on incentive effects of minimum wages.

- Analytical inputs by the European Commission (DG EMPL, DG ECFIN, JRC), as detailed in Annex 4 on "Analytical methods".

- Relevant academic literature, as referred to in footnotes.

Annex 2 Stakeholder consultation

A number of stakeholder consultations have been performed to inform this initiative. This includes the two Treaty-based Social Partners Consultations and targeted consultation with the Member States (through the Council Advisory committees: Employment Committee (EMCO), Social Protection Committee (SPC) and Economic Policy Committee (EPC)). Views were also collected from the European Economic and Social Committee during the EESC public hearing on "Decent minimum wages across Europe", which took place on 25 June 2020. The EESC also prepared an exploratory opinion on the minimum wage initiative, on the request of the European Parliament. The European Parliaments expressed views on the minimum wage initiative within the framework of a discussion initiated by the EESC, on 25 June, in the preparation of this Opinion and during the discussion of the Draft report on reducing inequalities with a special focus on in-work poverty.

The two-stage consultation of the social partners ensured a high level of transparency and openness by making public all relevant documents. Moreover, DG EMPL also launched on 14 January a broad consultation with stakeholders on new measures for the Action Plan to implement the European Pillar of Social Rights. This consultation provides all stakeholders with the opportunity to express their views, including on minimum wages.

A public consultation on the minimum wage initiative was not conducted. However, views were collected within the framework of the public consultation on the implementation of the European Pillar of Social Rights[190] and through the replies to the Standard Eurobarometer 92 (Autumn 2019), which included questions about the European Union's priorities (including the minimum wage).[191]

A2.1. Results of the first phase Social Partners consultation

The first stage consultation of social partners was open from 14 January to 25 February 2020. The Commission received 23 replies from European social partners representing trade unions and employers' organisations at EU level.

Five trade unions replied to the first stage consultation: the European Trade Union Federation (ETUC), Eurocadres, the CEC European managers, the European Arts and Entertainment Alliance (EAEA) and the European Confederation of Independent Trade Unions (CESI). ETUC's reply also represents the views of ten European sectoral trade union organisations.

On the employers' side, 18 organisations replied to the consultation, namely BusinessEurope, the European Centre of Employers and Enterprises providing Public

[190] https://ec.europa.eu/social/main.jsp?catId=1487&langId=en
[191] Report on Europeans' opinions about the European Union's priorities

Services (CEEP), SMEunited, the Council of European Employers of the Metal, Engineering and Technology-Based Industries (CEEMET), the European Confederation of the Woodworking Industries (CEI-Bois), the Council of European Municipalities and Regions (CEMR), the Confederation of European Security Services (CoESS), the European Chemical Employers Group (ECEG), the European Cleaning and Facility Services Industry (EFCI), the European Furniture Industries Confederation (EFIC), the Retail, Wholesale and International Trade Representation to the EU (EuroCommerce), the European Construction Industry Federation (FIEC), the Hotels, Restaurants and Cafés in Europe (HOTREC), the European Federation for print and digital communication (Intergraf), the International Road Transport Union (IRU), the Live Performance Europe (Pearle), the European Furniture Manufacturers Federation (UEA) and the World Employment Confederation (WEC).

In addition, the European Commission received two joint social partner contributions, one from the Sectoral Social Dialogue Committee on Local and Regional Governments (joint contribution from the European Public Service Union (EPSU) and the Council of European Municipalities and Regions (CEMR)) and one from the Sectoral Social Dialogue Committee for Central Government Administrations (joint contribution from the European Public Administration Employers (EUPAE) and Trade Unions' National and European Administration Delegation (TUNED).

Identification of the issues and possible areas for EU action

European workers' organisations consider that the Commission has only partly identified the core problems related to fair minimum wages. In their view, the central role of social partners in wage setting was rightly stressed and challenges were correctly described, especially on in-work poverty, new forms of work and gender inequality. Statutory minimum wages are set at rates that are too low to be fair, but the Commission, according to respondents, did not sufficiently identify solutions to tackle the underlying problem of low wages in general, and it did not take into account the impact of zero-hour work arrangements and self-employment. They also pointed out that the increase in self-employment means that many workers would not benefit from EU action. In their view, the best tool to achieve the objective of fair wages is the adequate promotion, protection and support for collective bargaining. Therefore, they suggested that the analysis should reflect the challenges regarding collective bargaining, as well as the need for EU action in this field and possible measures. According to the respondents, the document was unclear on how a possible EU initiative would fully respect and safeguard well-functioning systems of collective bargaining, and should further clarify what the EU can and cannot do in the field of minimum wages.

European employers' organisations have divergent views on whether the Commission has correctly identified the issues and possible areas for EU action. On the one hand, several organisations agreed with the importance of fair minimum wages. Others positively assessed the analysis of the Commission and confirmed that the Commission correctly identified the overall policy objective and a number of relevant challenges,

especially those concerning low-wage workers, collective bargaining, the setting of statutory minimum wages and the insufficient involvement of social partners. SMEUnited pointed out that minimum wages can help prevent unfair competition and social dumping on the labour market, which is a key concern for SMEs. On the other hand, a number of respondents disagreed with the Commission's assessment of the challenges and issues. Most of these organisations pointed to insufficient consideration of economic arguments, including negative impacts e.g. on employment and competitiveness, as well as productivity. Some requested definitions of core terminology, such as 'fair minimum wages'. BusinessEurope called for further examining the justifications for gaps in the coverage of minimum wages. Assessing adequacy in terms of take-home pay and considering which parts of the wage are included in adequacy calculations was proposed by BusinessEurope, although, according to HOTREC, EU action should not propose assessing the take-home pay of minimum wage earners in relation to income levels that protect against poverty. Many requested more clarity, in particular on the choice of the legal instrument, and asked for an in-depth legal analysis and for additional analysis of the economic and social effects of minimum wages.

Furthermore, some employers' organisations questioned the effectiveness of minimum wages alone as a tool to improve living standards and address in-work poverty. In this regard, some also agreed that discussions on minimum wages cannot be isolated from broader labour market and social issues.

Need and scope for EU action

All European workers' organisations stated that there is scope for EU action on minimum wages, namely on two main areas: (i) to promote and safeguard (sectoral and cross-sectoral) collective bargaining, including capacity building of social partners; and, (ii) to increase statutory minimum wages to a level at which they ensure at least a decent standard of living. All agreed that any action must fully respect the autonomy of social partners and safeguard well-functioning collective bargaining systems. ETUC considers it important that a clearer distinction is made between the challenges and possible actions concerning statutory minimum wages on the one hand and wages set in collective agreements on the other hand. Workers' organisations did not express a preference for a particular legal instrument, except CESI, which advocated for a binding framework.

Regarding the issue of promoting and safeguarding collective bargaining, the workers' organisations proposed requiring Member States to take action to increase the collective bargaining coverage rate when it is below 70%. They also suggested a variety of measures to promote collective bargaining (such as making sure that the necessary institutions are in place, strengthening collective bargaining for all sectors of the economy, and ensuring the respect of the right to collective bargaining). Moreover, ETUC suggested that Member States should introduce extension mechanisms for collective agreements only when proposed by the social partners at the national level. This was supported by EPSU and CEMR in their joint reply.

Regarding the level of statutory minimum wages, the workers' organisations proposed a measure of minimum wage adequacy. Specifically, they suggested that minimum wages should be at least 60% of the national full-time median wage, and most organisations proposed to assess adequacy based on gross rather than net minimum wages. Concerning coverage, they considered that statutory minimum wages should cover all workers, including currently excluded categories of workers, such as non-standard workers, and sub-minimum wages should be removed. Moreover, they underlined that Member States should genuinely involve all social partners in statutory minimum wage setting. They also pointed out that any possible EU initiative should not limit increases of statutory minimum wages, weaken well-functioning industrial relations systems based mainly, or exclusively, on collective bargaining, or introduce statutory minimum wages in Member States where social partners do not consider them necessary.

None of the employers' organisations was in favour of a possible binding EU initiative in the area of minimum wages. Most organisations contended that the EU has no competence to introduce a legal instrument on minimum wages or collective bargaining based on Article 153 TFEU. Moreover, BusinessEurope and SMEUnited consider that wage coverage issues are outside of the EU competence. Most organisations highlighted that wage setting mechanisms and wage policy fall within the competence of the Member States and national social partners. A number of respondents stated that the Commission should consider alternative options in the areas where the EU has competence and frameworks exist, such as the European Semester.

The majority of the employers' organisations raised concerns that EU action might directly and indirectly interfere with national wage setting systems and the autonomy of social partners, with a potentially detrimental effect on collective bargaining and social dialogue. According to many employers' organisations, an EU action may eventually weaken collective bargaining, by breaching social partners' autonomy. Many of them stressed that any potential EU initiative must respect the principle of subsidiarity, national traditions, social partners' autonomy and the freedom of collective bargaining.

Nevertheless, several employers' organisations believe that there is an added value for an EU action on minimum wages, but this should be of a non-binding nature. In particular, the majority of the organisations agreed that the European Semester is the most appropriate tool to steer reforms in this area. Some stated that social partners should be more involved in the Semester than is currently the case[192]. General support was expressed for country-specific recommendations in the field of minimum wages to strengthen the involvement of social partners, promote a structured exchange of information and best practices, and enhance enforcement mechanisms. Furthermore, actions at EU level (e.g. EU funding) that strengthen social dialogue and the role and

[192] Social partners provide input to the Commission ahead of the adoption of the Annual Sustainable Growth Strategy (ASGS) and participate in the ensuing discussions. They also provide input to the Commission's analysis of economic and social developments in each Member State, which feeds into both the Country Reports and the Country-Specific Recommendations.

autonomy of social partners at all levels, as well as actions for capacity building (also at a sectoral and regional level), would be welcomed. Moreover, various employers' organisations proposed to reinforce the involvement of social partners in statutory minimum wage setting and the establishment of well-functioning consultation processes. BusinessEurope also suggested clear and stable criteria to guide adjustments of statutory minimum wages. A few employers' organisations considered that non-compliance with minimum wages could be addressed by gathering appropriate data and through labour inspections and public-private partnerships. BusinessEurope also pointed out that the way forward to improve economic and social convergence across the EU is through broader measures, such as enhancing the single market, better functioning education and training, as well as investment in R&D and in welfare systems.

Willingness to enter into negotiations

European workers' organisations were open to start negotiations, but considered it premature at this stage of the consultation. None of the European employers' organisations has so far shown willingness to enter into negotiations. Some were open to consider starting a dialogue at a later stage on issues related to wage setting mechanisms (notably SMEUnited on specific topics, CEEP subject to receiving more information on possible instruments, CoESS subject to appropriate discussions in sectoral dialogue committees, and the World Employment Confederation after having seen possible actions in the second stage consultation document).

A2.2. Results of the second phase Social Partners consultation

The second phase consultation of social partners was open from 3 June to 4 September 2020. The Commission received 19 replies from European social partners representing trade unions and employers' organisations at EU level.

Three organisations representing trade unions replied to the second stage consultation: CEC European Managers, the European Confederation of Independent Trade Unions (CESI) and the European Trade Union Confederation (ETUC). ETUC's reply also represents the views of ten European sectoral trade union organisations.

On the employers' side, 16 organisations replied to the consultation, namely BusinessEurope, the European Centre of Employers and Enterprises providing Public Services (CEEP), SMEunited, the Council of European Employers of the Metal, Engineering and Technology-Based Industries (CEEMET), the European Confederation of the Woodworking Industries (CEI-Bois), the Council of European Municipalities and Regions (CEMR), the Confederation of European Security Services (CoESS), the European Chemical Employers Group (ECEG), the European Cleaning and Facility Services Industry (EFCI), the European Furniture Industries Confederation (EFIC), the Retail, Wholesale and International Trade Representation to the EU (EuroCommerce), Employers' Group of Professional Agricultural Organisations in the European Union (Geopa-Copa), the Hotels, Restaurants and Cafés in Europe (HOTREC), the European

Federation for print and digital communication (Intergraf), the International Road Transport Union (IRU), and the World Employment Confederation (WEC).

Specific objectives of a possible EU action

Workers' organisations generally agreed with the objectives identified in the consultation document. ETUC stated that an initiative should not make collective bargaining subject to EU conditions, rules or interpretations that would undermine trade unions' and workers' rights nor endanger existing statutory minimum wage systems. CEC European Managers stressed that national traditions and social partners' autonomy should be respected. According to ETUC, the Commission could have addressed more the (key) role of sectoral collective bargaining, as it constitutes a key component to ensure upward wage convergence and to increase collective bargaining coverage.

Employers' organisations generally showed support for most of the objectives stated in the consultation document. However, regarding the objective to limit or eliminate variations and exemptions, the employers' organisations expressed objections. BusinessEurope questioned the added value of EU regulatory action regarding statutory minimum wage setting in view of the diversity of national frameworks. Furthermore, employers' organisations stressed that the competences of Member States and/or social partners need to be fully respected at all times.

Views on possible avenues for EU action

The ETUC and CEC European Managers welcomed the Commission's proposal to include measures to promote collective bargaining in its initiative. However, ETUC stated that the policy options to promote collective bargaining as identified by the Commission were unclear. ETUC, CEC European Managers and CESI emphasised that collective bargaining should be available to all workers (including managers) regardless of the sector or employment status. ETUC and CEC European Managers also stressed the importance of providing social partners with adequate resources and tools to support (sectoral) collective bargaining. Both ETUC and CESI proposed the amendment of public procurement rules to incentivise companies to pay minimum wages. Besides this, ETUC repeated its proposal that Member States and/or social partners should develop an action plan to increase bargaining coverage when coverage is below 70% of the national workforce (or below 70% in a sector). It also stated that the right to collective bargaining must be respected and no extension mechanisms should be required.

Some employers' organisations (BusinessEurope, CEEP, ECEG, Intergraf) expressed concerns that EU action would undermine the autonomy of social partners, weaken collective bargaining and well-established national wage setting systems, in particular if binding requirements were to be established. BusinessEurope rejected any EU action aimed at extending coverage to all workers in countries where minimum wages are exclusively set through collective bargaining, as this would interfere with national

collective bargaining systems. A number of organisations[193] suggested that the Commission should support the capacity building of national (sectoral) social partners and the structured exchange of best practices to strengthen their role in collective bargaining, also by making more funds available. The EFCI and CoESS welcomed the Commission's proposal to map the implementation of the social clause in the Public Procurement Directive 2014/24/EU. In addition, they welcomed the provision of incentives to promote well-functioning collective bargaining on wage issues (EFCI) and a list of possible actions to support collective bargaining on wage setting (CoESS).

All workers' organisations called for regular, clear and predictable procedures for setting statutory minimum wages. ETUC emphasised that Member States must be free to set their own statutory minimum wage with the full involvement of social partners. Furthermore, ETUC stressed that the Commission should clearly address the differences between statutory minimum wages and wages set in collective agreements. ETUC also made it clear that no Member State should be required to introduce statutory minimum wages and that such an introduction in any case should not be possible without social partners' agreement. ETUC and CESI called for the updating of minimum wages at least once a year and at least every two years respectively. ETUC called for a combined minimum wage threshold of 60% of the national full-time gross median wage and 50% of the national full-time gross average wage. CESI proposed 60% of the national full-time (gross) median wage as a minimum threshold. ETUC stated that deductions from statutory minimum wages should be prohibited and tips and other extra payments should be excluded. ETUC and CESI proposed additional indicators of adequacy, such as country-specific reference baskets of goods and services that ensure that the minimum wage (set in any case above the aforementioned thresholds) guarantees a decent living.

On the provision of clear and stable criteria in minimum wage setting, several employers' organisations[194] argued that this falls within the competence of national authorities and/or social partners. CoESS stated that the proposed criteria should remain non-binding, while the EFCI considered the provision of specific indicators for assessing minimum wages in Member States a positive tool to reach agreements in collective bargaining. BusinessEurope added that specific indicators could be provided against which minimum wage adequacy but also the economic and labour market impacts of increased minimum wages could be assessed. A number of organisations (BusinessEurope, SMEunited, CoESS, HOTREC) furthermore emphasized the importance of taking into account broader factors such as national tax and social benefit systems, economic and social conditions, productivity levels and employment, when assessing the adequacy of minimum wages. According to SMEunited, the main indicator when assessing the adequacy of minimum wages should be the gross value of the minimum wage.

[193] These are BusinessEurope, CEEMET, CEI-Bois, CEMR, ECEG, EFCI, EFIC, EuroCommerce, and WEC.
[194] These are SMEunited, CEEMET, CEI-Bois, CoESS, ECEG, EFIC, EuroCommerce, and Intergraf.

All workers' organisations called for full (and genuine) involvement of all social partners in minimum wage setting and updating procedures. ETUC and CEC European Managers proposed a timely sharing with social partners of all relevant data and information to evaluate the adequacy of statutory minimum wages. CEC European Managers indicated that the consultation of social partners should preferably be binding for policymakers. ETUC did not consider useful an obligation to involve independent experts. CEC European Managers stated that when independent expert bodies are involved, the contribution of social partners should be strengthened and, when relevant, be considered more important.

The employers' organisations welcomed the initiative to ensure that social partners are involved in statutory minimum wage setting in an effective and timely manner, provided that their autonomy and national traditions are fully respected. SMEunited, however, noted that the Commission did not pay sufficient attention to how social dialogue can be promoted in those Member States where the social partners play no or only a minor role in (minimum) wage setting. EFCI expressed concerns about the provision of independent experts to be associated with minimum wage setting and updating. BusinessEurope highlighted that the establishment of well-functioning consultation procedures should be supported.

ETUC stated that any type of statutory minimum wage exemptions and statutory sub-minimum wages should be removed. CESI argued for eliminating exemptions or at least for reducing them to the bare minimum, pointing specifically to the situation of vulnerable self-employed workers. Furthermore, CESI explicitly stated that a minimum wage framework should also apply to the public sector, under certain conditions.

The employers' organisations reiterated their objections related to eliminating variations and exemptions. While some agreed that it would be reasonable to limit exemptions to the minimum necessary (CEEMET, EFCI, Intergraf), the majority of the organisations[195] argued that justified exemptions decided by social partners and/or the national government should remain. EFCI would welcome guiding criteria regarding their fair use.

All workers' organisations called for the involvement of social partners in compliance and monitoring activities. They also called for increased capacity for compliance and monitoring in the form of strengthened labour inspectorates, clear documentation of working time, complaint systems, sanctions and remedies as well as the collection of data and information through common tools and criteria. ETUC proposed to have at least one labour inspector for every 10.000 workers. ETUC called for ensuring effective implementation of collectively agreed statutory minimum wage increases by Member States. It also argued Member States should be required to take action in the area of compliance and enforcement. ETUC and CESI advocated employer liability throughout a

[195] These include BusinessEurope, CEEP, SMEunited, and HOTREC.

subcontracting chain if employers do not respect minimum wages or the rights to organise or bargain collectively.

Several employers' organisations (SMEunited, CEEMET, CoESS, EFCI, Geopa-Copa, HOTREC, WEC) supported the call on the Member States to ensure effective implementation and compliance with national minimum wage frameworks, emphasising that it is within the competence of national authorities to determine the compliance mechanisms and ensure implementation. BusinessEurope questioned the added value of EU action, but stated that support could be provided to those Member States in which a need for improvement on these aspects has been identified (e.g. through the Semester process). Moreover, SMEunited and CoESS agreed with the role of social partners in that regard. SMEunited furthermore supported the recommendation to Member States to reinforce the data collection tools and monitoring frameworks on minimum wage coverage, and CEEMET suggested allocating EU funds for research and data collection on non-compliance.

Views on the possible legal instruments

ETUC called on the Commission to propose a Framework Directive with binding minimum requirements, complemented by a Council Recommendation elaborating on specific elements. CESI called for an EU Directive with binding requirements. CEC European Managers considered a Recommendation the most effective tool to achieve the main objective of the initiative, as it would allow identifying the common objectives to be reached across the Union and provide technical guidance. ETUC and CEC European Managers argued for clauses to ensure that a legal instrument could not adversely affect collective bargaining or minimum wages. ETUC also called specifically for a social progress clause to protect collective bargaining and other trade union rights. ETUC proposed that any measures taken should be monitored by Member States with the full involvement of national social partners.

None of the employers' organisations was in favour of a binding EU Directive in the area of minimum wages. Most organisations reiterated that based on Article 153 (5) TFEU, the EU has no competence to introduce a legal instrument on wage setting mechanisms or collective bargaining, which fall within the competence and authority of the Member States and national social partners. Furthermore, CEEP and CEMR contended that a Directive would lack proportionality. A majority of the employers' organisations raised concerns that a binding EU Directive would not ensure the full respect of the autonomy of social partners and the freedom of collective bargaining, and could potentially lead to disruptions of well-functioning wage setting systems and established industrial relations. Several employers' organisations (BusinessEurope, CEEP, SMEunited, CoESS, EFCI, Geopa-Copa, IRU, HOTREC, WEC) stated that they could consider a Council Recommendation, provided that the autonomy of social partners and freedom of collective bargaining are fully respected and well-functioning national wage setting mechanisms are not undermined. BusinessEurope stressed that the European Social Partners and national governments should be fully involved in drafting such a

Recommendation. SMEunited suggested that a Council Recommendation could define a number of common principles related to collective bargaining, the capacity building of social partners and their timely and effective involvement in minimum wage setting, when this is set by law. In addition, a number of respondents[196] stated that the Commission should consider the European Semester as a tool to better target specific guidance and monitor progress regarding minimum wage setting, in particular via the country-specific recommendations. BusinessEurope, CEEMET, and HOTREC also advocated a stronger involvement of the social partners in the Semester process.

Willingness to enter into negotiations

ETUC stated that there seems to be no opportunity to open social partners' negotiations which could achieve a positive outcome. ETUC still remains open to discussions provided there is a clear and public engagement by employers' organisations of their willingness to open negotiations to deliver an ambitious agreement leading to a Council Directive. CEC European Managers would consider negotiating if other social partner organisations would be open to this.

On the side of the employers' organisations, BusinessEurope, CEEP and SMEunited expressed their willingness to start a formal dialogue and to explore the possibility to enter into negotiations on the content of a Council Recommendation together with the other European social partners provided that the existence of a legal basis for EU action has been clearly established. Some employers' organisations (HOTREC, EuroCommerce) expressed their interest in being involved if the cross-sectoral social partners decide to enter into negotiations.

A2.3. Results of targeted consultations with Member States

- **Joint EMCO-SPC exchange of views on the minimum wage initiative**

The Employment and Social Protection Committees (EMCO and SPC) held a joint meeting to exchange views on the minimum wage initiative on 7 September. The Committees are each composed of two delegates from each Member State coming from the authorities responsible for employment and social policy.

Views on the objectives of a possible EU action

Most Committee members were in favour of an EU initiative. There was general agreement on the importance of protecting workers with fair minimum wages, especially in the current crisis situation. In their view, ensuring adequate minimum wage levels and coverage for all forms of work can contribute to the achievement of upward social convergence and to the fight against poverty, including in-work poverty. Several members referred to the relevance of the initiative with respect to the European Pillar of

[196] These are BusinessEurope, CEEP, SMEunited, CEEMET, CEMR, CoESS, ECEG, EFCI, EuroCommerce, Geopa-Copa, HOTREC, and WEC.

Social Rights, while one member mentioned that it would be a good instrument to fight social dumping. However, some fears were also expressed concerning the respect of national traditions, but also regarding the risk of creating obligations for only some Member States.

Several members expressed the view that collective bargaining should remain the main channel for wage setting, with some expressing concerns about the possible disruption of well-functioning collective bargaining systems and the non-respect of the national social partners' autonomy. However, one member pointed that social partners' autonomy should not lead to situations where groups of workers are excluded from minimum wage protection. Another member suggested that national legislators should follow the outcome of leading collective agreements to set a sufficient and decent hourly remuneration for all the workers, irrespective of their type of contract and sector of activity.

One member also called to consider the links between a possible initiative on minimum wages with one on minimum income.

Types of interventions best suited for increasing the coverage and adequacy of minimum wages

All members stressed the importance of social partners' involvement in minimum wage setting and updating. The majority supported the promotion of collective bargaining as the best means to achieve the specific objectives of the initiative, with some calling to support social partners' capacity building.

Some members emphasised that clear and stable criteria should guide the adjustment of statutory minimum wages. A majority of the members considered that the objective of adequate minimum wages should be achieved taking into account the effects on employment, productivity and competitiveness.

Members' views regarding the use of adequacy indicators and reference values were mixed. A number of members supported using them on the basis of the ongoing benchmarking exercise, while others saw this as going beyond the EU competence. A member argued in favour of using the national gross average wage as a reference indicator. At the same time, another member considered that multiple indicators and benchmarks are needed to assess adequacy and these benchmarks should take national characteristics into account, such as taxation and social benefits.

Some members supported measures to ensure monitoring and compliance at both national and EU level. One member favoured a specific monitoring system looking at the effects of the minimum wage on women who are a single parent, and on older workers, in the context of combatting poverty, especially child poverty.

A number of members voiced their objections to excluding the use of exemptions and variations, while some expressed their support.

Legal instrument

While a few members supported a binding instrument, the majority were in favour of a Council Recommendation. Many stressed the importance of the ongoing monitoring and exchange of best practices through the EPSCO treaty-based Committees, and some were in favour of a benchmarking mechanism. Some members also called for relying on the European Semester as a vehicle for achieving the goals of the initiative.

A few members did not take a position on the choice of the legal instrument but called on the Commission to reflect on the most effective tool given the different models and objectives.

Policy options that could be more effective for tackling in-work poverty

With regard to in-work poverty, several members expressed the view that having a specific instrument on minimum wages (and proper monitoring) can help reduce the growing group of working poor in Europe. Some considered that provisions to ensure minimum wage adequacy through the definition of clear criteria are specifically relevant. Yet, a number of members pointed out that tackling in-work poverty requires a holistic approach or integrated framework in accordance with the specific needs of each Member State. Within such an integrated framework, adequate minimum wages with broad coverage are a key component, together with access to social protection and to enabling services. It was underlined that special attention needs to be given to workers in atypical forms of employment.

Some members expressed their fear that if minimum wages were fixed at a certain level, this might create rigidities in the labour market, lower the working hours per employee or lead to job losses. The impact on work incentives was also mentioned. In their view, where minimum wages are not flexible, the wages just above them tend to drop, thus potentially worsening the problem of in-work poverty.

- **EPC exchange of views on the minimum wage initiative**

The Economic Policy Committee (EPC) held an exchange of views on the minimum wage initiative on 8 September. This Committee includes two members from each Member State coming from the authorities responsible for formulating economic and structural policy, as well as a representative from the European Central Bank.

Views on the objectives of a possible EU action

Most Committee members expressed their support for an EU initiative on minimum wages, with some stressing the need to take into account the heterogeneity of the national

minimum wage setting systems. All members stressed the importance of protecting workers with fair minimum wages, especially in the current crisis situation, thereby supporting the general objective of the initiative. Some members pointed out that an EU framework would help social upward convergence, with one member recalling it would also support the implementation of the European Pillar of Social Rights.

All members agreed on the need to respect national traditions and social partners' autonomy. A few members emphasised that some systems based on collective bargaining are working well and hence the initiative should not endanger them. In their view, strengthening collective bargaining would be the best way forward for all countries.

Types of interventions best suited for increasing the coverage and adequacy of minimum wages

A few members stressed the importance of supporting and promoting collective bargaining through the initiative, especially in countries where it does not work very well. A member also called for enhancing the capacity building of social partners.

Some members underlined the need for stable and clear criteria to set and update statutory minimum wages. Several members underlined the importance of looking not only at social and equity aspects, but also at economic considerations. A number of members pointed out that the effect on employment needs to be taken into account, even if it is difficult to assess. One of them was concerned that an increase of minimum wages could have detrimental effects on the workers that the initiative is trying to protect, such as those with low skills. Another member argued that inflation and productivity should be taken into account when setting minimum wages.

Several members stressed the difficulty of identifying the level of minimum wages that would allow for a decent standard of living while safeguarding jobs and competitiveness. Some members inquired about the concept of fairness and how to define a fair minimum wage. One member cautioned against the use of one indicator to assess adequacy, explaining the need to use multiple indicators and benchmarks. Moreover, a member voiced objections to banning the use of exemptions and variations.

Legal instrument

With regard to the legal form of the initiative, the majority of members were in favour of a non-binding instrument that could take the form of a Council Recommendation, while two members expressed their support for a Directive. Some members explicitly stated their opposition to a Directive, arguing that either there was no legal basis for it or it would endanger collective bargaining. A few members expressed their support for a benchmarking mechanism on minimum wages.

A2.4. Other consultations

Summary of the Opinion of the European Economic and Social Committee (EESC) on the minimum wage initiative

The European Parliament requested an exploratory opinion from the EESC with a view to a forthcoming Commission initiative on fair minimum wages. The final opinion, SOC/632 - Decent minimum wages across Europe was adopted on 16 September 2020. .

Quality jobs, with fair wages – including decent minimum wages across Europe – are needed as part of the solution to the current crisis. Minimum wages should be fair in relation to the wage distribution in the different countries and their level should also be adequate in real price terms, so that they allow for a decent standard of living whilst at the same time safeguarding the sustainability of those companies that provide quality jobs.

The EESC Workers' Group and the Diversity Europe Group supported the view that all workers in the EU should be protected by fair minimum wages which allow a decent standard of living wherever they work. This is a fundamental right and is a key aspect of the implementation of Principle 6 of the European Pillar of Social Rights. The Employers' Group was of the view that setting minimum wages is a matter for the national level, done in accordance with the specific features of respective national systems. A majority of the EESC welcomed the objectives identified by the Commission and considered that they should be addressed through EU action on fair minimum wages. A minority, however, believed that EU action on some of those objectives would not be appropriate.

There was a general consensus on the need to preserve the systems that currently work. All participants mentioned the critical role that social partners play in the wage setting process and the importance of collective bargaining. Its promotion has been highlighted as one of the main aspects that the initiative should encompass. The EESC welcomed the indication that any Commission initiative would not seek to introduce statutory minimum wages in countries with high coverage of collective bargaining and where wage setting is exclusively organised through it. While a majority of EESC constituents believed that EU action could provide an added value others disagree. Among the key concerns expressed, were that the EU would have no competence to act on "pay", including pay levels, and that such action could interfere with the social partners' autonomy and undermine collective bargaining systems, particularly in Member States where wages set in collective agreements.

The Workers' Group and Diversity Europe Group considered that action is needed as there are workers in the EU, notably vulnerable workers, who are not protected by statutory minimum wages, or earn a minimum wage that does not ensure a decent standard of living. In their view, it would be beneficial if common EU thresholds were

agreed upon to determine what amounts to "a decent standard of living". The Employers' Group considered that thresholds for minimum wages must not be set by means of EU action as the EU has no competence on setting pay levels. According to them, what could be done at EU level, at most, is to discuss and exchange views through the Open Method of Coordination or the European Semester. Discussions could focus on how to ensure adequate benefit levels and adequate minimum income schemes and how, along with employment, this can support financing of adequate social protection systems.

On the possible legal instrument of the initiative, most workers' representatives seemed to be in favour of a Directive (although only some of them made their support explicit), while employers groups are clearly against it and would be in favour of a softer approach, i.e. a Recommendation monitored under the European Semester.

Summary of the discussion during the EESC public hearing on "Decent minimum wages across Europe" on 25 June 2020

On 25 June, in view of the preparation of the above mentioned Opinion, the EESC held a hearing where they invited as participants Nicolas Schmit, Esther Lynch (ETUC), Maxime Cerutti (Business Europe), Kélig Puyet (Social Platform), Özlem Demirel (MEP, DE), Dennis Radtke (MEP DE), as well as Agnes Jongerius (MEP, NL).

The majoritarian view of the participants was that there is need for EU action on the issue of fair minimum wages, and the current crisis highlighted even more this need. The opposing view on this came from employers' representatives who considered that the timing was not right, as this action might have repercussions at the economic and social level.

There was general consensus on the need to preserve the systems that currently work, and participants acknowledged the Commissioner's firm stance on this. All participants mentioned the imperative role that social partners play in the wage setting process and the importance of collective bargaining. Its promotion and support were highlighted as one of the main aspects that the initiative should encompass. On the legal instrument chosen, workers' representatives seemed to be in favour of a Directive, while employers' groups spoke against this, supporting a softer approach, i.e. Recommendation monitored under the European Semester.

Views of the European Parliament

Within the framework of the abovementioned discussion initiated by the EESC on 25 June, the participating Members of Parliament all agreed on the timeliness of the minimum wage initiative, especially in the current crisis situation where workers who kept our societies afloat, are usually the ones that would be at the centre of this initiative. Özlem Demirel (MEP for DE, GUE/NGL and Rapporteur on reducing inequalities with a special focus on in-work poverty) stated that the 60% poverty line should be taken as a

threshold and that the MW should not be lower than that, as this is the minimum to be done for in-work poverty. Collective bargaining should be promoted as it is not working everywhere as it should, giving examples of coverage differences across EU. Dennis Radtke (MEP for DE, EPP and member of the Committee on Employment and Social Affairs) argued that the solution is not a formula of the poverty line, but rather coverage of collective agreements, as fair minimum wages and wages more generally can only be reached through collective bargaining. Agnes Jongerius (MEP for NL, S&D and member of the Committee on Employment and Social Affairs) underlined the need to talk about the MW proposal but also about wage growth and precarious working conditions and collective bargaining.

Members of the European Parliament also expressed views on the minimum wage initiative during the discussion of the Draft report on reducing inequalities with a special focus on in-work poverty that took place on 16 July. Rapporteur Özlem Demirel (GUE/NGL) emphasised the importance to focus on in-work poverty – referring to specific measures, in particular European minimum wages, as well as collective bargaining. Anne Sander (EPP) highlighted that this was an important subject and measures were needed for poor workers, in particular young people. Marianne Vind (S&D) stressed that in-work poverty was a growing challenge and a social protocol is needed; she referred to the growing challenges linked to online platforms and the lack of social rights and underlined that the role of collective bargaining is essential. Atidzhe Alieva-Veli (RENEW) accentuated the importance of fair remuneration to reduce inequalities while respecting subsidiarity. She mentioned that atypical working conditions raise issues underlining the role of collective agreements, as well as skills and qualifications. The green transition can improve productivity. Dominique Bilde (ID) underlined that inequality is increasing, linked to jobs losses. She considered that the COM is imposing flexibility on labour markets and competition among EU workers and that more should be done to defend our economies. Katrin Langensieppen (Greens/EFA) emphasised that poverty and inequality are a key challenge and mentioned that her amendment will focus on persons with disabilities and strategies on undeclared economy. Elżbieta Rafaslka (ECR) pointed out that the poverty target has not been achieved and the risk with the pandemic is that poverty and in-work poverty will increase with unemployment. She also highlighted the importance of support to families to fight against poverty and that there is no one size fits all.

Furthermore, in its Draft report on a strong social Europe for Just Transitions from 28 September that will be adopted in December 2020, the Committee on Employment and Social Affairs of the European Parliament calls on the Commission to present a legal framework for minimum wages and collective bargaining in order to eliminate in-work poverty and promote collective bargaining. It also reiterates its call on the Commission to carry out a study on a living wage index, which could serve as a reference tool for social partners.

A2.5. Public consultations

Replies to the European Pillar of Social Rights Public Consultation

Respondents to the Public Consultation on the European Pillar of Social Rights Action Plan overall addressed the importance of the fight against poverty, amongst which some mention the importance of minimum/fair wages in this respect.

Of the organisations having replied to the public consultation so far, the European Anti-Poverty Network (EAPN) stated its support for a EU legal framework guaranteeing minimum living wages, benchmarked at 60% of the median wage, contextualised with reference budgets, as part of their call for an EU strategy to fight poverty as an overarching goal of the EPSR Action Plan. For EAPN, the value-added of an EU Directive would not only consist in the requirement for a statutory minimum wage for all countries, but rather in setting up a clear comparable EU benchmark for adequacy whilst respecting the national means and procedures to achieve this. EAPN proposed that the best way this can be achieved was by defining and enforcing a set of common minimum requirements all Member States have to comply with. Specifically, it called for 1) the coverage of the whole workforce by MW arrangements, 2) the level of pay and therefore the adequacy of MW (in relation to take-home pay levels sufficient to protect workers against poverty and to support a decent living on the backdrop of price levels and living costs in a given MS), and 3) the mechanisms in place to guide adjustments of (statutory or collectively bargained and agreed) minimum wages. EAPN also proposed the support of collective bargaining and the effective involvement of social partners in the adjustment of minimum wages. They proposed using the European Semester, as a soft instrument, to set a fair wage/decent work priority through CSRs. This could include: increased analysis of in-work poverty related to gender and other groups, supporting increased employment security/employment status for all workers, collective bargaining and trade union membership and person-centred supportive active inclusion.

The European Organisation of Military Associations and Trade Unions (EUROMIL) also mentioned the issue of minimum wages and collective bargaining in their contribution. It recommended to grant members of the armed forces the right of association without restriction. Once established, military associations and trade unions should be involved in a social dialogue and be given the right to bargain collectively. More concretely, the military salary should at least be comparable to the levels of payment in the public service.

The Employers' Association of Insurance Companies believed that an expansion of social policy regulations does not make a suitable contribution to a sustainable social policy. Rather, it considered that such efforts put a lasting strain on the competitiveness of the European economy. In addition, it argued that the European Union has no legislative competence regarding the 20 basic principles contained in the European Pillar of Social Rights. In this respect, the Employers' Association of Insurance Companies supported

Business Europe's proposal to set up a tripartite advisory committee to improve the performance of labour markets and social systems by the European Commission.

The European Disability Forum (EDF) noted that "persons with disabilities are often paid at or below minimum wage, work part-time, have precarious work contracts and even work in isolated workshops away from the open labour market." without further referring to the minimum wage initiative.

From the citizens' replies, a citizen from Spain stated that the EU should prioritise the right to adequate living standards and services through quality jobs and fair wages, income support to those who cannot work and qualitative universal services. A citizen from Poland stated that a minimum wage initiative should be accompanied by other social protection measures, such as a minimum/social pension system.

Finally, during the consultation period, 8 webinars were organised by the Commission with Croatia, Greece, Hungary, Slovenia, Lithuania, Portugal, Finland and France so as to discuss the Action Plan to implement the European Pillar of Social Rights. In all 8 meetings, organised with stakeholders from the 8 countries, an EU framework for fair minimum wages was brought into discussion as one of the initiatives supporting the Action Plan.

On 18 June, in the webinar organised with Croatian stakeholders, the representative of the Institute for Public Finance considered the minimum wage to be one of the priorities the EU should follow, as well as strengthening social dialogue, among others. The trade union representative also mentioned the strengthening of social dialogue at all levels, including collective bargaining as a tool for wage convergence.

On 26 June, in the webinar organised with Greek stakeholders from the government, but also trade union and employers' organisations, as well as NGOs, the employers' representative emphasised that the 20 principles of the Pillar correspond to the needs we need to take into account when addressing the transformation of our economy. The approach should be tripartite, and there should also be a tripartite forum at the national level to discuss the implementation of the Pillar. As regards already planned initiatives, he hoped there could be common ground on fair minimum wages. The trade union representative also touched upon this issue when mentioning the protection of vulnerable workers and addressing poverty and social exclusion, including among workers as priorities for the EU.

On 7 July, in the webinar organised with Hungarian stakeholders, both trade unions and employers' representatives focused their input on the need to strengthen tripartite social dialogue systems as well as collective bargaining at national level. Commissioner Schmit reiterated the social and economic logic behind the planned initiatives on fair minimum wages and collective bargaining.

On 7 September, in the webinar organised with Slovenian stakeholders, the representative of the association of Employers claimed that wages should be defined in an agreed and transparent manner and reminded that the social partners should not be prevented from participating in the determination of the minimum wage. The representative of the Social Protection institute stressed the need to find the just calibration to create incentives to encourage work since there is a tight gap existing between social assistance benefits and full time minimum wages.

On 22 September 2020, in the webinar organised with Lithuanian stakeholders, Lithuanian experts on economic and social policy claimed that the initiative on the fair minimum wages should only be the first step toward the pan-EU social protection that should be more ambitious to improve working conditions.

On 24 September 2020, in the webinar organised with Portuguese stakeholders, the trade union representative stressed the importance of minimum wages but criticised that minimum wage increases have not appropriately reflected the needs of workers since there are still many cases of in-work poverty.

On 28 September 2020, in the webinar organised with Finnish stakeholders, employers' union representative had a concern that the initiative will interfere with the Nordic model of wage setting and claimed for the respect of subsidiarity.

On 2 October 2020, in the webinar organised with French stakeholders, both trade unions and employers' representatives advocated the implementation of this initiative since it can ensure a proper level playing field in the EU single market and reduce poverty. The trade union representative stressed the necessity to complement this initiative by undertaking a reflection on working hours to safeguard the efficiency of this measure.

View expressed through the Standard Eurobarometer 92 (Autumn 2019), which included questions about the European Union's priorities (including the minimum wage)

In the Standard Eurobarometer 92 from Autumn 2019, on which citizens expressed their opinions about the European Union's priorities, nearly nine in ten Europeans thought that each EU Member State should have a minimum wage for workers. An overwhelming majority of respondents, i.e. 87%, agreed that 'each EU Member State should have a minimum wage for workers'. 56% of respondents 'totally agreed' with this statement. Meanwhile, less than one in ten Europeans (8%) did not share this opinion, while 5% said they do not know. The feeling that each EU Member State should have a minimum wage for workers was widely shared throughout the EU, with respondents in euro area countries (90% total 'agree' versus 7% total 'disagree') feeling stronger towards it than in countries outside the euro area (83% versus 10%).

This is complemented by the fact that more than eight in ten Europeans felt that a free market economy should go with a high level of social protection. More specifically, nearly nine in ten respondents (86%) agreed that a 'free market economy should go with a high level of social protection'. More than half (51%) even said that they 'totally agree' with this statement. Meanwhile, only 6% disagreed, and 8% said they 'don't know'.

Annex 3 Who is affected and how?

A3.1. Practical implications of the initiative

If the initiative is adopted, its key obligations will apply for the Member States, workers' and employers' representative organisations, employers, and the Commission.

All Member States will have to consider policy and/or legislative changes to strengthen collective bargaining (regulatory framework, capacity building), enforcement and ensure better compliance. In addition, Member States with statutory minimum wages will have to adjust/determine the modalities of their statutory minimum wage setting frameworks, and to invest more resources in strengthened consultation with social partners.

Obligations for workers' and employers' representative organisations (social partners) arise from strengthened collective bargaining, which depends on social partners, and their role in enforcement. In addition, in Member States with statutory minimum wages, they will have greater role in the setting and updating of statutory minimum wages. For that, they will have to strengthen their resources and analytical capacity. Employers will have to respect agreements on minimum wages and pay to the workers agreed minimum wages.

Summary of costs and benefits

- The main benefits of the preferred package are achieved through improved adequacy, in particular due to the non-binding reference value, and coverage of minimum wages, a reduced uncertainty due to improved frameworks to set statutory minimum wages as well as strengthened enforcement of minimum wage regulations.

- **Workers/Citizens/Consumers -** For workers, in particular low-wage earners and other vulnerable groups including women, the benefits will be better protection through higher and more adequate minimum wages as well as being covered by minimum wages, either collectively agreed or statutory ones. Further benefits arrive from improved enforcement and compliance of minimum wage rules, reduced uncertainty about future entitlements, improved working conditions, reduced wage inequality, in-work poverty and gender pay gap. In terms of costs, workers could face negative employment impacts, but these are expected to be modest. Consumers might face higher prices, which would be more than compensated for low wage earners by higher minimum wages.

- **Businesses** – They will benefit from more fair competition and a more level playing field and from reduced uncertainty about wage developments. In addition, they will benefit in terms of increased productivity as a result of higher

motivation and engagement of workers. In terms of costs, the businesses can face higher labour costs, lower profits and increased costs related to strengthened collective bargaining.

- **Workers' and employers' representative organisations** – They will benefit from strengthened collective bargaining and a stronger role in setting and updating statutory minimum wages. This will entail some cost for social partners in terms of capacity building and modest yearly costs for enhanced collective bargaining and involvement of social partners in updating statutory minimum wages.

- **Member States' administrations** - Benefits for all Member States are small positive impacts on public budgets via higher tax and contribution revenues. For Member States with statutory minimum wages, the benefits are improved governance, transparency and clarity of minimum wage setting. Those benefits should more than counterbalance administrative costs related to the measures (e.g. putting in place a regulatory framework or enabling conditions for collective bargaining on wages, capacity building, enforcement, improving statutory minimum wage setting framework).

Tables below provide more details on benefits and costs of the preferred option.

I. Overview of Benefits (total for all provisions) – Preferred Option		
Description	***Amount***	***Comments***
Direct benefits		
Increased wages for minimum wage earners.	Wages of minimum wage earners are estimated to increase by 0,4% equivalent to EUR 20-23 billion (intermediate reference values of 55% of median wage or 45% of the average wage) or 1% equivalent to EUR 51-53 billion (highest reference values of 60% of median wage or 50% of the average wage).	This effect is a result of all actions. Calculations are quantified based on simulations related to hypothetical minimum wage increases to the non-binding reference value which is part of the preferred package. See Annex 12.1 for results by Member State.

Higher coverage by minimum wages.		Not possible to quantify. An increase in collective bargaining coverage can be expected in countries without a statutory minimum wage with comparatively lower current coverage.
Reduced uncertainty about future entitlements for workers due to improved frameworks to set statutory minimum wages.		Not possible to quantify.
Reduced uncertainty for firms about future labour costs, better business environment, due to improved frameworks to set statutory minimum wages.		Not possible to quantify.
Improved governance and participation with stronger involvement of social partners.		Not possible to quantify.
Improved working conditions through better access to collective bargaining for workers.		Not possible to quantify.

Indirect benefits		
Reduced wage inequality, in-work poverty, and gender pay gap.	Wage inequality is estimated to be reduced by 5-6% (8-10%) across the EU, in-work poverty by 6-7% (11-12%) and the gender pay gap by 2% (5%) for intermediate (high) reference values.	This effect is a result of all actions. Calculations are quantified based on simulations related to hypothetical minimum wage increases to the non-binding reference value which is part of the preferred package (55% or 60% of the median wage). See Annex 12.1 for results by Member State.
A better level playing field for firms already compliant with minimum wage rules due to strengthened enforcement of minimum wage regulations.		Not possible to quantify.

II. Overview of costs – Preferred Package							
		Citizens/Consumers		Businesses		Administrations	
		One-off	Recurrent	One-off	Recurrent	One-off	Recurrent
(1) Action related to collective bargaining	Direct costs	None	None	None	Costs related to increased minimum wages included in costs under point (2).	Possible financial burden to introduce administrative reforms.	Some financial burden of actions related to capacity-building of social partners.
	Indirect costs	None	Costs related to higher min. wages included in costs under point (2).	None	None	None	None
(2) Action related to national frameworks	Direct costs	None	None	None	Costs for firms of 25% of the cost of increased wages, amounting to about EUR 5-6 (13) bn per annum for intermediate (high) reference values.	Possible financial burden to introduce administrative reforms.	Some financial burden related to regular assessment of criteria and consultation activities.
	Indirect costs	None	Indirect cost to consumers of about 75% of increased wages, or about EUR 15-17 (38-40) bn per annum for intermediate (high) reference values.	None	None	None	None

(3) Action related to involvement of social partners	Direct costs	None	None	None	Costs related to increased minimum wages included in costs under point (2).	Possible financial burden to introduce administrative reforms.	Some financial burden related to regular and timely consultations.
	Indirect costs	None	Included in the costs under point (2) to the extent that these actions contribute to more adequate minimum wages.	None	None	None	None
(4) Action related to variations	Direct costs	None	None	None	Costs related to increased minimum wages included in costs under point (2).	Possible financial burden to introduce administrative reforms.	None
	Indirect costs	None	Included in the costs under point (2) to the extent that these actions contribute to more adequate minimum wages.	None	None	None	None

(5) Action related to enforcement	Direct costs	None	None	None	Small increase in costs related to inspections.	Possible financial burden to introduce administrative reforms.	Some financial burden related to strengthened labour inspectorates or other relevant bodies.
	Indirect costs	None	None	None	None	None	None

Annex 4 Analytical methods

This Annex describes methods used in the Impact Assessment.

A4.1. Summary of studies prepared for this Impact Assessment

Studies commissioned from external experts:

- "Indexation of statutory minimum wage" by Diane Delaurens and Etienne Wasmer. The study provided a typology and discussion of the indexation systems being used in the EU. The study recommended to promote a combination of partial indexation rules (based on a fraction of inflation and a fraction of the growth of average real wages, called hard indexation) and periodic discretionary changes (that can informally reflect the non-indexed inflation and growth of real wages, called soft indexation). This combination had the potential to reduce the potential disconnection between minimum wages and productivity in periods of negative inflation or increased polarisation.

- "Effects of statutory minimum wages on small and medium-sized enterprises" by Attila Lindner, University College London. The study summarised the key theoretical and empirical results on how the minimum wage affects the allocation of labour between different types of firms. In particular, the study investigated the impact of the policy on small and medium sized enterprises. The report presents a description of the key theoretical considerations and summarises the existing but limited empirical literature on the topic.

- "Effects of collectively agreed minimum wages in the Nordic countries" by Per Skedinger, Research Institute of Industrial Economics (IFN). The study examined the system of collectively agreed minimum wages in Nordic countries, their effect on employment, and how they contribute to reducing in-work poverty.

Eurofound studies: Three country reports requested from Eurofound on the setting and adequacy of minimum wages as well as related policy debates focusing, respectively, on Austria, Italy and Cyprus.

European Centre of Expertise (ECE): A set of expert reports on the minimum wage setting systems of EU Member States (one expert report for each Member State) provided by the European Centre of Expertise (ECE).

Simulations: Simulations, within the framework of an existing contract, by the OECD on incentive effects of minimum wages.

Internal studies and other sources:

- "Macroeconomic effects of minimum wages: Model-based simulations using the QUEST model", by DG ECFIN. This background paper discussed the effects of introducing a minimum wage within in a general equilibrium framework. For this purpose, we embed a low-wage sector with employer monopsony market power into the QUEST model. The employment effects of minimum wages depend on the structure of the labour market: In a model calibrated to Germany, a minimum wage of up to 17% above the monopsony case is roughly employment-neutral while reducing consumption inequality and wage dispersion. Without monopsony market power, a minimum wage above the competitive wage reduces employment. The households' labour supply crucially matters for monopsony power. Spill-over effects to other countries after an introduction of minimum wages are small.
- Analytical inputs by the European Commission. In particular, microsimulation analysis of economic, social and fiscal impacts of minimum wages has been conducted by the JRC (see Section A4.3 below for a description of the methodology). In addition, analysis of the characteristics of minimum wage and low-wage earners has been conducted (see Section A4.2 below for a description of the methodology).
- Relevant academic literature, as referred to in footnotes.

A4.2. Identification of minimum (and low) wage earners

Analytical work for this impact assessment on minimum wage and low-wage earners has been prepared by DG EMPL based on anonymised individual data from the EU-SILC and EU-SES surveys.

Methodology of calculations based on EU-SILC

Analytical work on the characteristics of minimum wage and low-wage workers are summarised in 2.1.3 and, in more detail, in Annex 7. For this work, minimum wage earners are defined as those employees with a full-time equivalent monthly wage that ranges between 80% and 105% of the statutory minimum wage. Using an income range to identify minimum wage earners aims to control for minor errors related to reporting, rounding and conversion.

Full-time equivalent monthly wages are obtained from the micro-level data of the 2017 wave of EU-SILC. The EU-SILC dataset contains detailed information on socio-demographic characteristics and income of individuals and households. The 2017 EU-SILC survey contains information on wages in 2016. The full-time equivalent gross monthly wage is calculated by dividing the EU-SILC variable of annual cash gross earnings (PY010G) by the number of months worked in full-time jobs (PL073) plus the number of months worked in part-time jobs (PL074). A weakness of the data is that there

is a discrepancy between the time period in which the income and the months worked are measured (usually one year before the survey period) and the time period in which the number of hours worked is measured (survey year). Hence, for individuals for whom the working hours are strongly fluctuating over the two years, there can be measurement error. The methodology aims to impute hours worked of part-time workers by a country and gender-specific factor equal to the ratio of median hours of work in part-time jobs to median hours of work in full-time jobs. This methodology has been used in other studies on minimum wages (Brandolini et al., 2010; Eurofound, 2019).

Information on minimum wages in 2018 has been collected from OECD Statistics. This has been adjusted to be consistent with the income data found in the EU-SILC database which reflects 2016 prices and wages. In particular, the annual national statutory minimum wage in 2018 was deflated by the aggregate hourly wage growth between 2016 and 2018 obtained from Eurostat [nama_10_a10] to obtain an "adjusted" annual minimum wage for 2016. Hence, the "adjusted" minimum wage factors in the adjustments to the minimum wage that go beyond the aggregate hourly wage growth between 2016 and 2018. To obtain the monthly minimum wage for a full-time employee, the annual "adjusted" minimum wage is then divided by 12 months.

While it is possible to identify minimum wage earners in countries with a statutory national minimum wage, this is not possible in countries where minimum wage protection is provided by wages set in collective agreements. This is because of the multiplicity of such collectively agreed minima and because these are not collected systematically. For this reason, for comparability, the characteristics of low-wage workers were analysed for these countries as a proxy group.

Methodology of calculations based on EU-SES

Low-wage earners are defined as those employees (excluding apprentices) who earn two thirds or less of the national median gross hourly earnings. Median gross hourly earnings are obtained from the Structure of earnings survey (SES). This survey is carried out with a four-yearly periodicity according to Regulation (EC) No 530/1999. The most recent available reference year for the SES is 2014. National statistical offices collect the information on earnings used in the survey and it contains questions about the enterprise and on the individual employee, aiming to gather individual data on earnings and working hours, as well as personal characteristics and characteristics of the jobs. The statistics of the SES refer to enterprises employing at least 10 employees in all areas of the economy except agriculture, forestry and fishing and public administration and defence.

A4.3. Simulations with the Euromod model: Methodological notes

Results presented in Annex 12 have been obtained by microsimulation analysis using the Euromod model. Euromod is a unique microsimulation model for the European Union that allows to assess the distributional, inequality and poverty effects of real or hypothetical reforms in a comparative way across EU countries.

Euromod allows to account for the interactions between minimum wages and the tax-benefit system. For each individual in the data, tax liabilities and social benefit entitlements are simulated according to the laws of each country. Disposable income is calculated by adding benefits and detracting taxes from the gross income of each individual. The tax-benefit systems simulated in this research refer to those in place as of 30 June 2019, while the underlying data come from EU-SILC 2017 (reference income of 2016). In some countries, data are enriched by country-specific data sources. Wages (and all other monetary variables) are uprated to account for changes between the date of input data (2017) and 2019. EU-SILC is representative for the national population.

For computational reasons, the assignment of hypothetical minimum wages is done on an hourly basis. For this purpose, observed wages and hypothetical minimum wages (HMW) are converted to hourly levels. To this end, monthly HMW are divided by the average number of weeks in a calendar month and the median hours of work by full-time workers (which differ by country). Furthermore, to obtain gross hourly wages based on observed data, yearly earnings of employees are divided by the number of months and hours of work. To simulate the hypothetical scenarios, hourly earnings thus computed are increased to the HMW whenever they are lower than these in the baseline. The income of all non-employees, or employees identified as outliers, remains unchanged.

Possible measurement error in working hours is addressed by an outlier detection technique. The working time considered in the calculation of observed hourly wages contains two elements: weekly working hours and months worked per year. These two elements are measured in EU-SILC based on a different time period: the number of months in work are reported for the year preceding the survey (which is the income reference year; in this case 2016) while weekly working hours refer to regular working hours reported in the week the survey was taken (in this case, in 2017). This may cause a measurement error in calculating hourly wages if individuals change the amount of working hours from one year to the other. In general, the presence of measurement error in the calculation of hourly wages increases the variance of the wage distribution and therefore the incidence of low wages. As a consequence, the data might overestimate the presence of low-wage earners, which in turn can lead to an overestimation of the potential effect of a minimum wage policy. For this reason, to identify the outliers among hourly wages, we use the inter-quantile range technique.

In some cases, information about the actual working time needs to be corrected or imputed because of data issues. For some individuals, there is information on earnings

and months of work but not on working hours. For this missing information, we impute the working hours by using information on gender-specific median working hours and workers' history of full-time and part-time employment.[197] In addition, following EU's Working Time Directive, we cap the working time for which a HMW is assigned to 48 hours per week.

A4.4. Estimation of possible employment effects: Methodology

This impact assessment uses the "elasticity method" to estimate possible employment effects of higher minimum wages. It uses output from the Euromod microsimulation analysis, the methodology of which is explained in the previous subsection. A similar elasticity approach was taken by the US Congressional Budget Office in its recent assessment of hypothetical increases in the US federal minimum wage.[198]

The method relies on the so-called "own-wage elasticity", which measures how employment for the group affected by the minimum wage increase responds to an increase in the average wage of that group induced by the minimum wage change.[199]

The definition of the own-wage elasticity implies that the change in total employment is the product of three factors:

(1) the own-wage elasticity (*OWE*);
(2) the estimated percentage increase in the wages of those affected by the minimum wage increase ($\%\Delta\, Wage_{aff}$); and
(3) the share of workers affected by the new minimum wage ($Share_{aff}$).

Expressed in formula, this means that:

$$\%\Delta EMP = OWE * \%\Delta\, Wage_{aff} * Share_{aff}$$

Factors (2) and (3) are outputs of the Euromod microsimulations of various hypothetical scenarios.

In turn, factor (1), i.e. the own-wage elasticity used in this impact assessment is based on the survey of the recent literature by Dube (2019, op. cit.). Based on 48 recent international studies estimating the *OWE*, including evidence on EU Member States, Dube finds that the median elasticity found in the literature is -0.16.[200] This is close,

[197] This methodology has been proposed by Brandolini, A., Rosolia, A. and Torrini, R. (2010), "The distribution of employees' labour earnings in the European union: Data, concepts and first results", in Atkinson, A. B. and Marlier, E. (eds.), Income and Living conditions in Europe, Eurostat Statistical Books, Publications Office of the European Union, Luxembourg.
[198] See Congressional Budget Office (2019): "The Effects on Employment and Family Income of Increasing the Federal Minimum Wage", Washington.
[199] See an explanation of this concept by Dube, A. (2019): "Impacts of minimum wages: review of the international evidence", report presented to the UK Low Pay Commission, pp. 26-27. The CBO (2019) calls this concept "direct elasticity", or the "employment elasticity for all directly affected workers".
[200] Dube, A. (2019), op. cit., page 50.

although somewhat lower than what was found by the CBO (-0.25), based on a smaller selection of 11 studies for the U.S.

The chosen elasticity of -0.16 means that the minimum wage raises wages of low-wage earners much more than its possible negative impact on jobs. For the overall impact of a minimum wage increase to be negative on the wages of low-wage earners, the OWE would need to be lower than -1. Accordingly, elasticities between 0 and -0.4 can be considered as small.[201]

Naturally, there is uncertainty around the elasticity used, which is a source of uncertainty related to the estimated employment impacts. The elasticity of -0.16 can be viewed as a central estimate, while more optimistic and pessimistic scenarios could also be constructed by re-scaling employment effects to reflect an alternative elasticity. For instance, a more pessimistic alternative scenario is constructed by the CBO (2019, op. cit.) by assuming that long-term effects of minimum wage increases exceed those implied by the estimated short-term elasticities by 50%. This results in a possible long-term elasticity of -0.375 in the CBO assessment. A more optimistic scenario, in turn, could be that minimum wage increases, especially at moderate levels, do not have a negative employment effect at all. Such an optimistic scenario could be based on the consideration that many of the studies used in the literature surveys focus on specific groups of workers such as teenagers, and are not necessarily indicative of the overall impacts of minimum wages. Studies focusing on a broader set of low-wage workers, on average, imply smaller employment effects. In particular, "for the set of studies that consider broad groups of workers the median OWE estimate is quantitatively close to zero (-0.04)".[202]

Alternative approaches to assess the impacts of minimum wages on employment would also be conceivable. It is possible, for instance, to use fully-fledged macroeconomic models to do so. However, most macroeconomic models were not built, and are not particularly suitable, to study the effects of minimum wage increases. Most macroeconomic models have a simplified, "neo-classical", labour market module for ease of tractability. This implies that wage increases "imposed from the outside" result in large job losses by construction. A background paper prepared for this impact assessment by the European Commission (DG ECFIN) explores how the employment effects of minimum wages depend on the structure of the labour market in the Commission's QUEST model. The paper finds that labour market structures in which employers have wage setting power are compatible with the notion that minimum wage increases do not result in significant loss of employment or economic activity.[203] Calibrating macroeconomic models to reproduce the empirical elasticities (such as the OWE of -0.16

[201] Dube, A. (2019), op. cit., page 27.
[202] Dube, A. (2019), op. cit., page 50.
[203] European Commission (2019): "Macroeconomic effects of minimum wages: Model-based simulations using the QUEST model", DG ECFIN. See a summary in Section A4.1 above.

chosen in this impact assessment) would be possible. However, it would by construction provide identical results to those calculated here by the elasticity method.

A4.5. The OECD Tax-Benefit model: Methodological notes

The OECD TaxBen model[204] is a calculator of tax burdens and benefit entitlements for working-age families. It covers all EU countries and produces outputs for the years 2001 to 2019. It incorporates detailed tax and benefit rules which are validated by national ministries.[205] It is consistent across countries and over time, therefore it allows comparability.

1. Use of OECD TaxBen model for computing adequacy indicators

Adequacy indicators calculated in this impact assessment are based on the gross wages and net incomes of typical workers earning the minimum wage and other reference wage levels (e.g. a percentage of the national average or median wage), and their households.

The OECD TaxBen model allows to calculate these gross and net in-work and out-of-work incomes for these selected typical working-age families. In particular, the model has been used to compute gross wages and net incomes which are the denominators of some minimum wage adequacy indicators. In particular:

- Gross wages are expressed as a percentage of the average wage.[206]
- Net wages are gross wages plus cash benefits[207] minus income taxes and own social security contributions. Any taxes or contributions not paid directly by the wage earner or benefit recipient are not included in gross wages (and not deducted to arrive at net incomes).

The model allows these indicators to be calculated for multiple household types. In this impact assessment most indicators presented refer to single childless adult households,

[204] The OECD TaxBen model and related analytical reports have been produced with the financial assistance of the European Union Programme for Employment and Social Innovation "EaSI" (2014-2020). For more information, see: https://www.oecd.org/social/benefits-and-wages as well as: http://www.oecd.org/els/soc/OECD-Tax-benefit-model-Overview.pdf.

[205] All tax and benefit amounts are computed using the rules and regulation that were in force on 1 January of the relevant year.

[206] Average wages used by the OECD TaxBen model are calculated, where available, for Sectors B to N (ISIC Rev. 4 industry classification). Data relate to the average earnings for the country as a whole. The worker is an adult (male or female) worker in the covered industry sectors, including both manual and non-manual workers. The worker is assumed to be fully employed during the year, although several countries are unable to separate and exclude part-time workers from the earnings figures (in most of these cases, full-time equivalent wages are reported). Annual earnings are calculated by referring to the average of hourly earnings in each week, month or quarter, weighted by the hours worked during each period, and multiplied by the average number of hours worked during the year, assuming that the worker is neither unemployed nor sick and including periods of paid vacation. A similar procedure is used to calculate overtime earnings. Earnings are assumed to include average amounts of overtime and regular cash supplements (Christmas bonuses, thirteenth month payments and vacation month payments). Regular annual bonuses are included where they do not take the form of dividend payments. Fringe benefits are excluded.

[207] Cash benefits considered include unemployment insurance, unemployment assistance, social assistance, family benefits and lone-parent benefits, housing benefits, child-raising allowance paid to parents assuming childcare responsibilities for their own children and employment-conditional (or "in-work") benefits.

but some indicators have been calculated also for other household types as robustness checks. These household types include single-earner and dual-earner couples with and without children.

2. Use of OECD TaxBen model to simulate the impact of minimum wage increases on work incentives

Because of its focus on policy mechanics, the OECD TaxBen model is particularly suited for studying how tax-benefit and wage policies work and interact with one another in the context of policy design and policy assessment. It can be used conveniently for simulating the impact of a policy reform on a number of indicators, such as work incentives indicators and net incomes.

In this impact assessment, ad-hoc simulations done by the OECD have been conducted to show the impact of a 10% increase in the minimum wage on net family incomes among four household types: single working-age person, single working-age parent with a child, childless working-age couple and working-age couple with two children.

A4.6. Collective bargaining coverage: data issues

Existing information on collective bargaining coverage is based on a variety of sources, but the information is incomplete. More precise information could be useful, also in the Member States where minimum wage protection is provided by wages set in collective agreements, for governments and in particular social partners to be able to have a thorough assessment of the situation of low-wage workers.

Collective bargaining coverage is generally used as an indicator of the share of workers protected by wages set in collective agreements in Member States without a statutory minimum wage. The primary sources of this information is the ICTWSS database of the University of Amsterdam,[208] which is also the main source of OECD data. This database uses various national and comparative sources, survey data and historical estimates. Comprehensive (administrative) data are not available. One limitation of this type of information is that not all collective agreements set wages.

Often, information on collective bargaining coverage relies on company surveys. In some cases, various surveys may result in slightly different estimates. For instance, the estimate of collective bargaining coverage of 45% in Cyprus corresponds to the latest data from the 2014 EU Structure of Earnings Survey (for industry, construction and services, excluding public administration). With a different methodology and a smaller sample size, the European Company Survey 2013 by Eurofound estimates a coverage rate of 61%. For Italy, company surveys focusing on firms employing ten or more employees in the private sector yield higher estimates than the 80% coverage rate found

[208] For a description of the latest version of the database, see Visser, J. (2019). ICTWSS Database, Version 6.1. Amsterdam: Amsterdam Institute for Advanced Labour Studies (AIAS), University of Amsterdam. November 2019.

in the primary data sources.[209] Still, as about 95% of Italian enterprises are small companies with 9 employees or less,[210] these surveys are thought to overestimate the economy-wide coverage.

Various surveys have different advantages and disadvantages. An important source of information, the EU Structure of Earnings Survey (EU-SES) is a large survey of companies, comparable across Member States, conducted every four years. However, it excludes companies employing less than 10 workers, a segment which is very important in many Member States: it represents more than 90% of companies employing more than 10% of workers in manufacturing, almost 50% of employment in construction and more than 30% in accommodation and food services.[211] Small companies are also less likely to be covered by collective agreements.

A4.7. Average and median wages: statistical issues

This Impact Assessment relies on newly compiled data by Eurostat to compare minimum wages to median and average wages. This is a methodological change as compared to previous documents which relied on OECD data.[212]

Both the average and the median wages are calculated based on earnings surveys. In particular, the latest available wave of the Structure of Earnings Survey (SES, referring to 2014 earnings) has been used to extrapolate median and average wages in 2019. The derived medians and means have been extrapolated using the wage component of labour cost index (LCI) data, published in the dataset '*lc_lci_r2_a'* of Eurobase. The final ratios have been calculated as the monthly gross minimum wage in force on 1 July 2019 divided by the median / mean monthly earnings estimated for the reference year 2019.

The basis of the calculations are monthly gross earnings in national currency. These include non-regular revenues such as bonuses and overtime. The corresponding figures are published in the dataset '*earn_ses_monthly*' of Eurobase.

The indicators shown in this impact assessment are based on the earnings of full-time workers, similarly to the definition of the OECD. This ensures consistency with the most widely used existing indicators which have shaped the views of stakeholders. An alternative version of the data covers part-time workers (converted into full-time equivalents). Part-time workers generally earn less than full-timers, even on an hourly

[209] E.g., EU Structure of Earnings Survey, Eurofound's European Company Survey 2013, as well as a 2016 survey by the National Institute of Statistics and the tripartite National Economic and Labour Council [CNEL, ISTAT (2016). Progetto CNEL-ISTAT sul tema "Produttività, struttura e performance delle imprese esportatrici, mercato del lavoro e contrattazione integrativa" – Report intermedio, (last consultation on 2 September 2019), p. 105-106.]

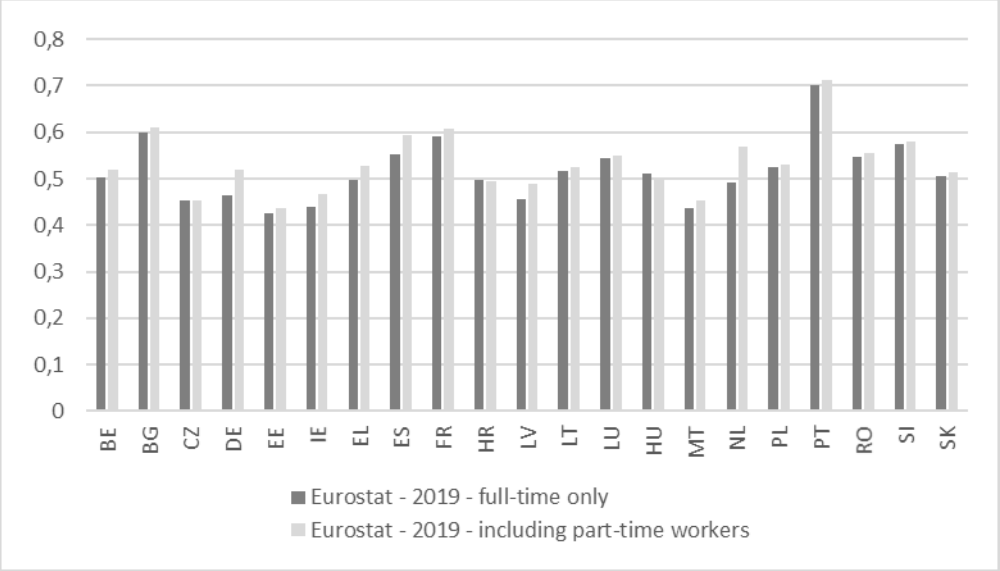
[210] ISTAT (2018). Annuario Statistico Italiano 2018, vol. 14 – Imprese, https://www.istat.it/it/files//2018/12/C14.pdf (last consultation on 2 September 2019), p. 488.

[211] Eurostat, Structural business statistics overview, URL: https://ec.europa.eu/eurostat/statistics-explained/index.php/Structural_business_statistics_overview#Size_class_analysis

[212] Previous documents include the analytical document accompanying the second-stage consultation of social partners, published on 3 June 2020.

basis. This means that, in countries with a high-share of part-time workers (e.g., Germany and the Netherlands), their inclusion increases the Kaitz ratios (Graph A4.1).

Graph A4.1: Minimum wages, expressed as a percentage of the gross median wage, 2019 – full-time workers only and part-time workers included



Source: Eurostat.

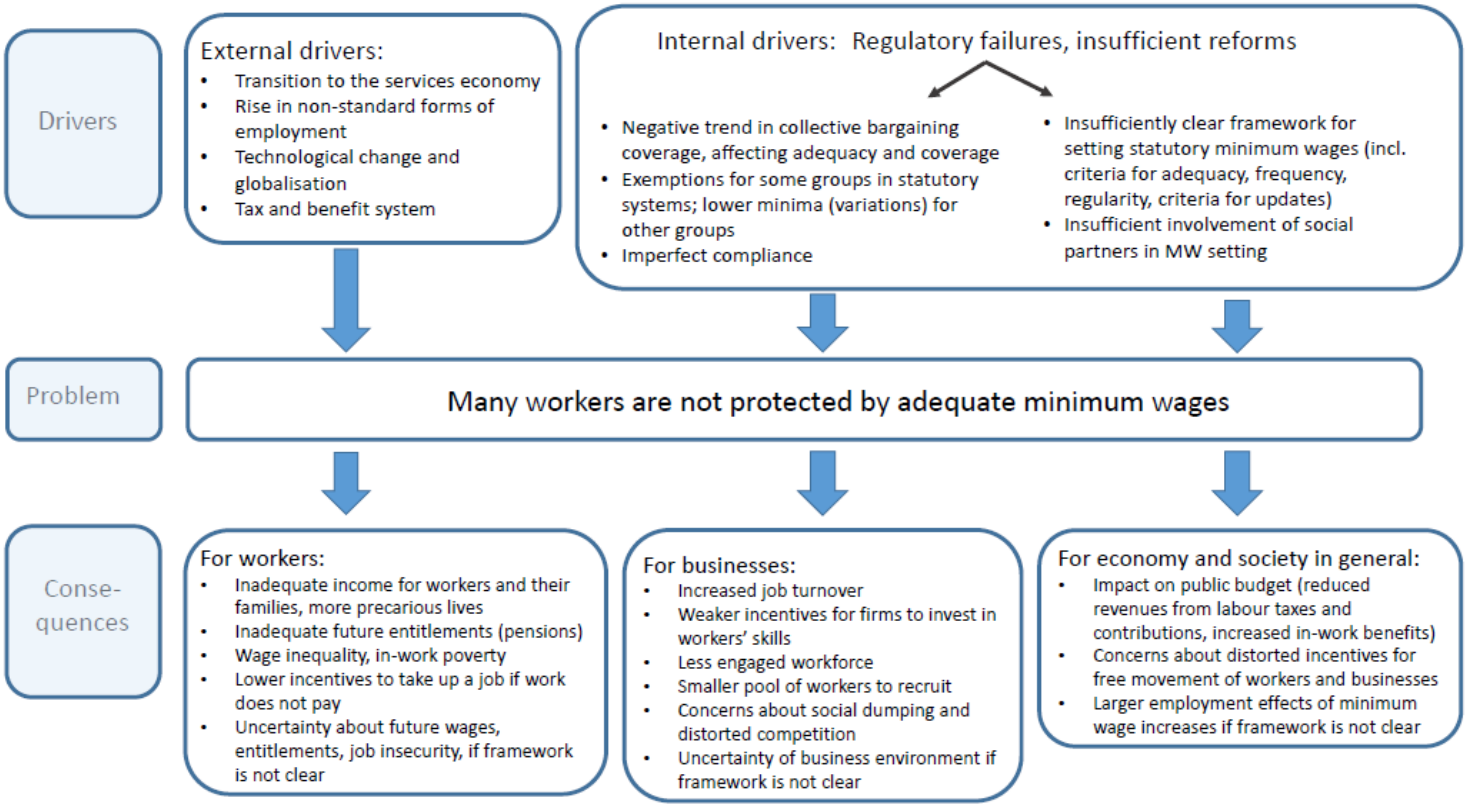
A4.8. Dissemination of statistical data for the UK

The dissemination of data within this Impact Assessment follows the Eurostat guidelines for the production and dissemination of statistical data by Commission services after the UK leaves the EU. In particular, in all the graphs displaying data covering a period prior to the year 2020, the UK data are published but are placed immediately after, but separate from, the 27 Member States. These data are presented only for illustration.

It should be noted that the UK data have been excluded from all the analysis and simulations performed for the purpose of this report.

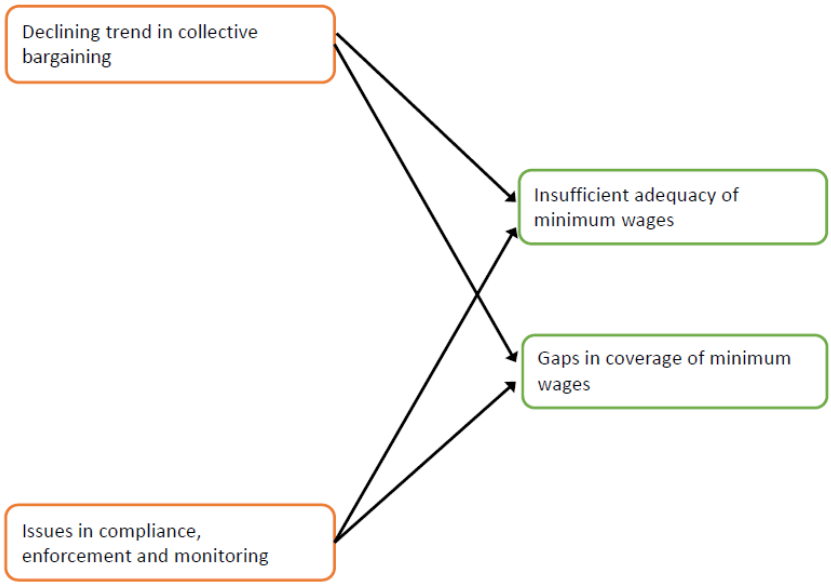
Annex 5 Visualisation of the problem tree and the intervention logic

Graph A.5.1: The problem tree

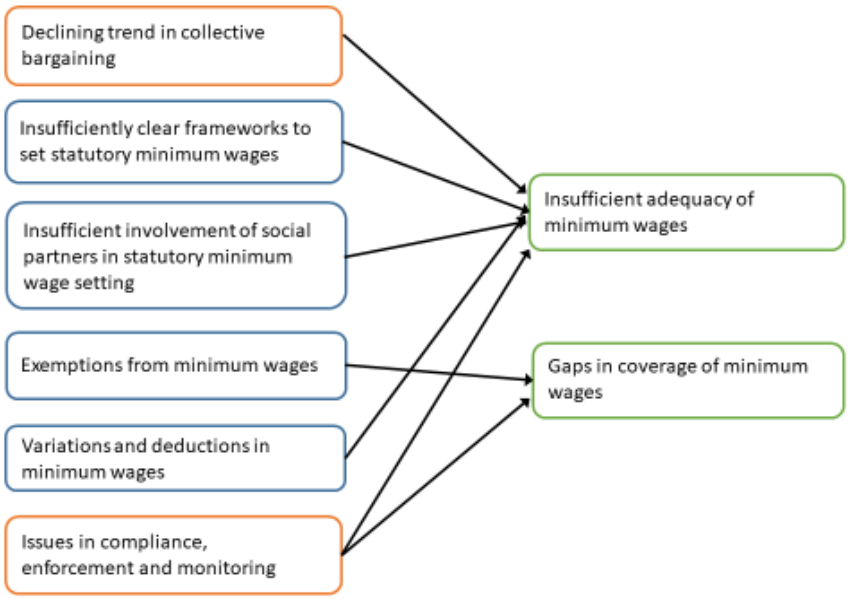


Graph A.5.2: The relationship between areas of action and specific objectives

(a) Systems where minimum wage protection is provided by collective agreements



(b) Systems with a statutory national minimum wage



Note: This graph is the counterpart of Graph 3 in the main text. While Graph 3 focuses on the links between the internal drivers and the aspects of the problem, this graph's focus are the links between the corresponding areas of intervention and specific objectives.

Annex 6 Minimum wage setting systems in the EU

Minimum wage protection can be provided by collective agreements or by statutory minimum wages set by legislation. This section provides an overview of existing institutional settings.

A6.1. Minimum wage protection provided by collective agreements

In six Member States (Austria, Cyprus, Denmark, Finland, Italy, and Sweden) minimum wage protection is provided by wages set in collective agreements. Usually, these agreements are concluded at the sectoral level. In Cyprus, wages set in collective agreements for certain occupations coexist with statutory minimum wages set for other occupations.

In general, these Member States have a comprehensive collective bargaining system, with high membership of both unions and employers associations. As a result, a large proportion of workers are covered by collective agreements. National traditions of collective bargaining vary considerably. In Denmark, firms with collective agreements are obliged by law to apply the agreement to all workers, regardless of union membership. In Sweden, a double affiliation principle[213] applies. In Austria, employers are mandatorily members in the relevant employers' association; they are thus obliged to implement the collective agreements. In Finland, there are extension mechanisms that allow collective bargaining agreements signed by members of employers' associations to apply also to non-member companies within a sector and to their employees. Although formal extension mechanisms do not exist in Italy, case law and practice have systematically extended coverage to non-unionised workers. The rest of this section provides more detail on the existing systems in countries where minimum wage protection is provided by wages set in collective agreements.

Wages set in collective agreements are generally the outcome of bipartite negotiations by social partners. Since they can be agreed at various levels (national, sectoral, regional or firm level), the number of co-existing agreements can be high. Agreements can, and often do, provide for quite complex pay schedules differentiated by occupation, age, seniority, region and other dimensions.

In Austria, minimum levels of pay are set as part of social partners' collective agreements (CAs) at the sectoral/industry level. Wages set in collective agreements are legally binding for all companies in a given sector or industry as, by law, employers hold a mandatory membership of the relevant employers' association (WKO). In the

[213] Both the employer and the employee need to be members of the signatories of the collective agreement.

public sector, collective bargaining forms the basis for legal acts updating wages. The Federal Conciliation Office can also set legal wages for some groups not covered by CAs. Moreover, social partners at the peak level have in recent years set framework agreements on raising wages across all sectors while pay-related bargaining between local trade unions and individual companies is confined to questions of working time, leaves and other entitlements in most cases.

Cyprus has a mixed wage setting system that combines collective bargaining with a statutory minimum wage for a few occupations. Collective Agreements are not legally binding. In addition, minimum wages for selected occupations with "unreasonably low" salaries are regulated by ministerial decree, which, up until 2012 was updated following non-binding social partner consultations but has been frozen since then.

In Italy, wages set in collective agreements are set by two-tier collective agreements at the sectoral and company/territorial levels, regulated by civil law. No legal extension of collective agreements exists. The case law and national traditions have led companies to apply collective agreements to non-unionised workers too. Wage setting occurs primarily at the sectoral level, commonly between the most representative trade union organisations and employers' associations while pay-related bargaining at the company or territorial level is commonly confined to benefits and incentives.

In Denmark, wages set in collective agreements are based on collective bargaining conducted voluntarily by the social partners. There is no legal extension mechanism. Collective agreements that include wages are binding for both workers and companies. There are three wage setting systems: In the "standard-wage system", sectoral CAs in the public and parts of the private sector determine wage levels with strict constraints on local bargaining. Other sectoral CAs in the private sector allow for workplace-level negotiations, either setting a wage floor for young/inexperienced workers and requiring individual supplements or without wage and only serving as a safety net to local negotiations. The state supports dispute resolution through the Official Conciliator and the Labour Court.

In Finland, wages set in collective agreements are encompassing thanks to a legal "erga omnes" extension set by law. This extension mechanism extends CAs from employer associations' members, who directly implement the agreements signed by their respective confederations, to non-member companies within the same sector. In the few sectors without erga omnes applicability, the law still requires wages to be "usual and reasonable", which can be based on social partners' recommendations.

In Sweden, two-tier collective bargaining sets wages in collective agreements primarily at the industry/sectoral level, leaving company-level discretion in practice. Industry/sectoral CAs apply with binding force to both unionised and non-unionised workers in the companies/organisations of a signatory employers' association.

There is no legal extension mechanism for non-covered enterprises. The state's function is to provide the legal basis for the negotiations of the social partners, assigning social partners broad rights, and supporting enforcement and dispute resolution through the National Mediation Office and the Labour Court.

A6.2. Minimum wages set through legislative provisions

In the EU, 21 Member States have a statutory national minimum wage, a wage floor set by law applying to all sectors of the economy. There is a considerable variety across countries in the mechanism to set these. Differences concern, among other things, the actors involved and the level of government discretion in the decision-making process. In general, the minimum wage setting systems in the EU are either institutionalised (with a formal obligation to consult with relevant stakeholders), rule-based (indexation) or non-institutionalised (the government determines unilaterally the adjustment of the statutory minimum wage). The social partners are associated to different extents and with different modalities. Independent experts also play a role in a number of countries. Table A6.1 provides a summary of various minimum wage setting systems, while Table A6.2 provides an overview by country.

Table A6.1: The role of the government, social partners and other actors in statutory minimum wage setting systems

Statutory minimum wage							**Minimum wage setting relying on collective bargaining**
Institutionalised decisions					*Automatic Indexation*	*Non-institutionalised decisions*	
Gov't following the recommendation of MW specialised body	Gov't following bilateral/tripartite non-binding consultations process		Gov't following a tripartite decision making process	Gov't extends collective agreements by legislation			
DE	BG	PT	LT	'BE*	BE	CZ	AT
EL	ES	SI*	PL	EE	FR		CY
IE	HR	RO	SK		LU		DK
FR*	HU				MT		FI
	LV				NL		IT
	MT*				SI		SE

Note: * For discretionary changes.
Sources: Relevant national legislation; ILO Working Conditions Laws Database / Minimum wage fixing database

In 6 of the 21 countries (Belgium, France, Luxembourg, Malta, the Netherlands and Slovenia), formal indexation rules drive minimum wage updates on the basis of price and wage developments or a combination of both. In all six countries, there is also the possibility for discretionary changes on top of those linked to indexation. In 3 Member States (Belgium, Malta and Slovenia), the law specifies a formal obligation to consult social partners on such discretionary changes. In France, the law entitles social partners to present their recommendations to the government and these are published as an annex to the annual report of the Minimum Wage Expert Committee. In Luxembourg and the Netherlands, there is no legislative clause for social partner consultation. However, in both Member States, social partners provide non-binding views to the government on the minimum wage in practice.

In Germany, Greece, and Ireland**, the process of minimum wage setting is led by a minimum wage specialised body.** In these countries, an independent specialised body makes recommendations to the government on the annual minimum wage adjustment. In Greece and Ireland, the government can deviate from the recommendation but if it does, it has to justify the decision.

In Lithuania, Poland and Slovakia, the minimum wage setting system takes place in a structured tripartite system in which if an agreement is reached through the consultation process, then this is binding.

In Belgium and Estonia, changes to the minimum wage are decided bilaterally between the social partners through collective agreements; the agreements are then extended into legislation by the government.

In many Member States, the government makes a decision about minimum wage updates after an institutionalised process of consultations mostly with social partners. These are systems with well-defined decision-making processes and specific roles for the main actors. Specifically, in the majority of the Member States (Bulgaria, Spain, Croatia, Hungary, Latvia, Malta, Portugal, Slovenia and Romania) the government sets the minimum wage following an institutionalised bipartite or tripartite consultation process, defined by law. In all of these Member States, social partners provide non-binding recommendations; the government can set the minimum wage unilaterally. In Czechia, the adjustments of the minimum wage are decided by the government without specific rules or institutionalised consultation process defined by law. However, in practice social partners express views and non-binding recommendations through a tripartite committee.

Table A6.2: Summary of statutory national minimum wage setting systems

MS	Update mechanism		Frequency of updates	Timeliness of updates	SP Involvement
BE	Automatic indexation (prices), by law	Automatic indexation: if pivot index + 2 % over last base level, Δ MW based on the health index Discretional change based on labour costs (wage norm)	within the framework of CAB: Automatic indexation: continuous through the year Discretional changes: Bi-annual	In practice: entry into force (July)	SPs negotiate MW in binding collective bargaining agreements (still Gov discretion to adapt rules)
BG	No criteria specified by law	Target (in practice): MW level based on a fixed target level from Mid-Term Budget Forecast by the Ministry of Finance	Not specified	Not specified	SPs consulted in National Council for Tripartite Cooperation on non-binding basis
CZ	List of criteria defined by law. Adequecy target used in practice	Criteria : wages and consumer price developments by law plus labour market developments in practice Target: MW = 40% of average wages	Annual, in practice	Entry into force (January) by law	No involvement of SPs foreseen by law, unilateral decision by Gov possible
DE	Criteria defined by law	Wages and incomes (collective agreements), broad economic situation (competition, employment)	Bi-annual, by law	Start of the process (June) and entry into force (usually January), by law	SPs represented in MW Expert Body (MWC) making binding recommendation (still Gov discretion to implement)
EE	No criteria defined by law but used in practice Adequecy target used in practice	Criteria: Δ MW = 2* Δ labour productivity Targets: lower limit: 40% of the projected national average wage; upper limit: 2* projected Δ real GDP growth	Annual, in practice	In practice: entry into force (January)	SPs negotiate MW in binding collective bargaining agreements (still discretion to increase)
IE	List of criteria defined by law	Broad economic situation (e.g. employment, competitiveness), prices (cost of living), wages and incomes (changes in earnings)	Annual, in practice	Detailed calendar, by law	SPs represented in MW Expert Body (LPC) making non-binding recommendation (justification of deviation required)
EL	List of criteria defined by law	Broad economic situation (e.g. employment, competitiveness), prices, wages and incomes	Annual, by law	Detailed calendar, by law	SPs express views to MW Expert Body (KEPE) making non-binding recommendation
ES	List of criteria defined by law	Broad economic situation (e.g. productivity), prices (CPI), wages and incomes (e.g. labour share)	Annual, by law	In practice: entry into force (January)	SPs are directly consulted by Gov on no-binding basis
FR	Automatic indexation (prices and wages), by law	Automatic indexation: if CPI growth >2% since last MW update, Δ MW = 1/2 of Δ average hourly wage in pp Discretional change based on expert opinion and social partners agreement	Annual, by law (automatic indexation + discretional change)	Entry into force (January), by law	SPs express views to MW Expert Body (GoE) making non-binding recommendation (justification for deviation required, discretion to increase)
HR	List of criteria defined by law	Broad economic conditions (e.g. unemployment and employment), prices (inflation), wages and incomes	Annual, by law	Detailed calendar, by law	SPs consulted directly by Gov on non-binding basis
LV	List of criteria defined by law	Broad economic and labour market situation (e.g. labour productivity, unemployment), prices (e.g. labour costs), wages and incomes (e.g. labour income)	Annual, by law	Detailed calendar, by law	SPs consulted in National Tripartite Cooperation Council on non-binding basis

MS	Update mechanism		Frequency of updates	Timeliness of updates	SP Involvement
LT	List of criteria defined by law. Adequecy target used in practice	Criteria: Broad economic situation Target: average to minimum wage at 45-50%	Annual, by law	Start of the process (June) and entry into force (usualy January), by law	SPs make binding recommendations in Tripartite Council, but unilateral Gov decision if no agreement
LU	Automatic indexation (prices), by practice	Automatic indexation: if CPI + or -2.5% over last 6m Discretional change based on economic conditions and wage developments	In practice: Automatic indexation every 6m By law: Discretional changes: Bi-annual	Start of process (Gov report to Chamber of Deputies every 2 years), by law	No involvement of SPs foreseen by law, unilateral decision by Gov
HU	List of criteria defined by law	Broad economic and labour market situation	Annual, by law	In practice: start of the process (second half of the year)	SPs consulted in National Economic and Social Council on non-binding basis
MT	Automatic indexation (prices) plus discretional changes, by law	Automatic indexation: Cost of Living Allowance (retail price index) Discretional change: broad economic situation (e.g. productivity), prices (labour costs), wages and incomes (e.g. collective agreements)	Annual, by law	Entry into force (January), by law	SPs consulted in tripartite Employment Relations Board on non-binding basis
NL	Automatic indexation (wages) plus discretional changes, by law	Automatic indexation: 50% of wage growth (collectively bargained) + Δ predicted wage growth Discretional change: broad economic situation (employment, social security costs)	Twice per year (Jan & July), by law	Entry into force (Jan & July), by law	No involvement of SPs foreseen by law, unilateral Gov decision (discretion to adapt indexation rules)
PL	List of criteria defined by law	Broad economic and labour market situation (e.g. labour productivity), prices, wages and incomes Target: average to minimum wage at 50%	Annual (if inflation below 5%) or twice a year (Jan & July), by law	Detailed calendar, by law	SPs negotiate binding recommendation in tripartite Social Dialogue Council, but unilateral Gov decision if no agreement
PT	List of criteria defined by law	Broad economic situation (productivity), prices (cost of living), wages and incomes (income and price policy)	Annual, by law	In practice: Entry into force (January)	SPs consulted in tripartite Permanent Commission for Social Concertation on non-binding basis
RO	No criteria specified by law	Not specified	Not specified	Not specified	SPs consulted in National Tripartite Council for Social Dialogue on non-binding basis
SI	Automatic indexation (prices) plus discretional changes, by law	Automatic indexation: to costs of living (min +20 % / max +40%) + taxes and social security Discretional change: Broad economic and labour market situation (e.g. economic growth, employment), prices, wages and incomes	Annual, by law (automatic indexation + discretional change)	Entry into force (January), by law	SPs consulted directly by Gov on non-binding basis
SK	List of criteria defined by law	Broad economic and labour market situation (e.g. employment), prices, wages and incomes:	Annual, by law	Detailed calendar, by law	SPs negotiate binding recommendations in triparte Economic and Social Council (+ bilaterally), but unilateral Gov decision if no agreement

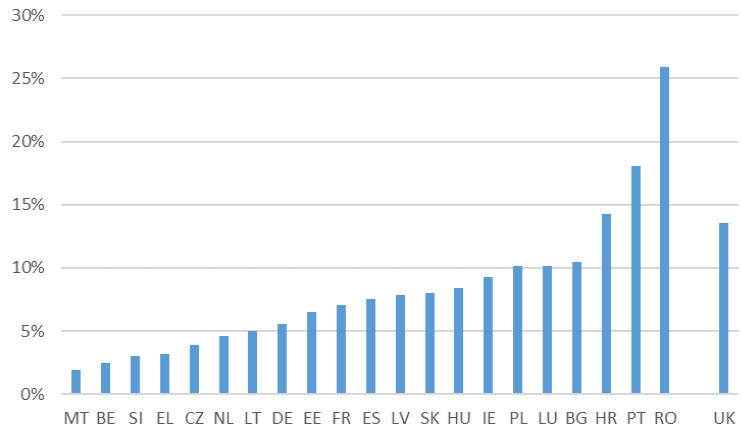
Annex 7 The profile of minimum wage earners

A7.1. Who are the minimum wage earners?

This section presents the demographic profile of minimum wage workers. The focus is on the personal and household characteristics of those paid at the minimum wage, their gender, level of education, contract type, working time pattern, as well as the type of household they live in. The next section looks at the distribution of workers across regions (by degree of urbanisation), sectors and the size of the firm they work for. In Member States without a statutory national minimum wage (i.e., Austria, Cyprus, Denmark, Finland, Italy and Sweden), it is not possible to identify workers who earn the wages set in collective agreements. This is because of the multiplicity of such minima and a lack of systematic data collection about them. For these countries, the share and characteristics of low-wage workers (those who earn less than 67% of the median wage in the same country) has been calculated as a proxy.

One in six workers are low-wage earners in the EU, earning less than two thirds of the median wage. Their share is above 20% in 10 Member States. Many of these workers earn the minimum wage: their share is estimated at levels that vary from below 5% (e.g. in Belgium and Malta) to around 20% (in Portugal and Romania) among countries with a statutory national minimum wage (see Graph A7.1).

Graph A7.1: Share of workers with wages at or around the statutory minimum wage, 2017



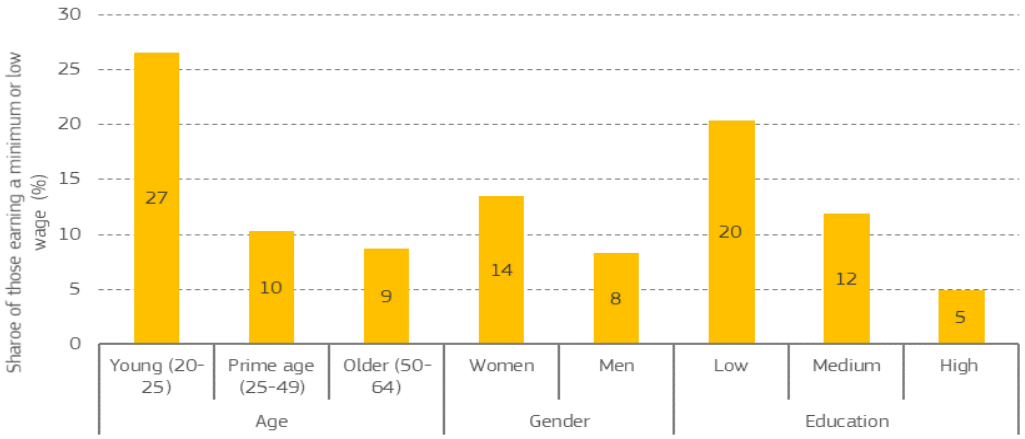
Note: Share of workers with wages between 80% and 105% of the statutory minimum wage. In Member States without a statutory national minimum wage (i.e., Austria, Cyprus, Denmark, Finland, Italy and Sweden), it is not possible to identify workers who earn wages set in collective agreements.
Source: European Commission based on EU-SILC 2017 for the Member States with a statutory minimum wage.

The "typical" minimum wage earner in most Member States is older than 25 years, has upper secondary education, is living in a couple and is predominantly female (see Graph A7.2 (a)). Although young workers have a higher likelihood to earn the

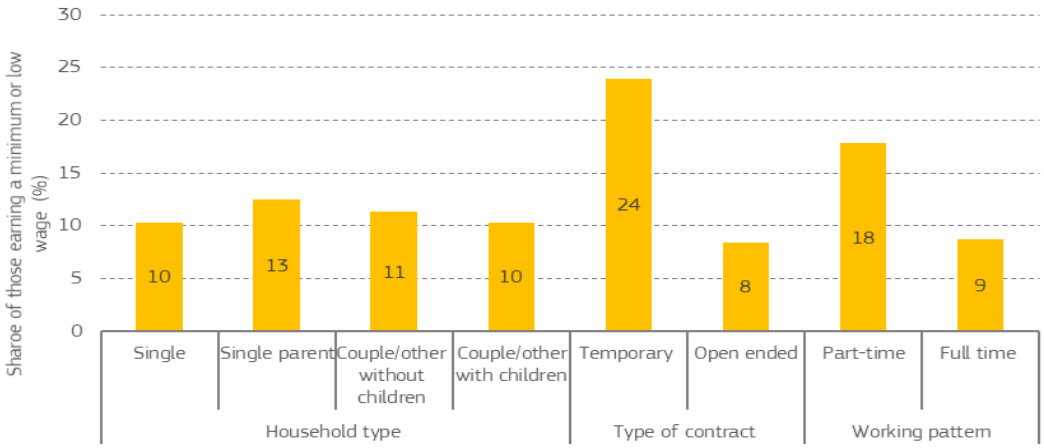
minimum wage than other age groups, they do not represent the majority of the minimum wage earners (Graph A7.3 (a)), since young workers represent a relatively small share of workers overall. There are substantial differences across Member States regarding the profile of the "typical" minimum wage earner in terms of age. While in Romania and Bulgaria, hardly any minimum wage earner is younger than 25 years old, the share of young workers is higher in the Netherlands and Malta, close to one in four.

Graph A7.2: The probability of being a minimum wage earner, by major individual and job characteristics in the EU, in percent, 2017

(a) Age, gender and educational attainment



(b) Household type, type of contract, working pattern



Note: The graphs display the weighted average across Member States. For the Member States with a statutory national minimum wage, workers with wages between 80% and 105% of the minimum wage were considered. For the other Member States, low-wage workers (less than 67% of the median wage) were considered.
Source: European Commission calculations based on EU-SILC 2017.

The majority of minimum wage earners are women, but the gender gap varies across Member States: being a woman doubles the likelihood of being a minimum wage earner in Czechia, Germany, France, Croatia, the Netherlands, and Slovakia but has a limited effect in Bulgaria, Estonia or Lithuania (not shown). Accordingly, women represent the majority of minimum wage earners in all Member States, their share exceeding 70% in Czechia, Germany, Malta, the Netherlands, Slovakia (Graph A7.3 (b)).

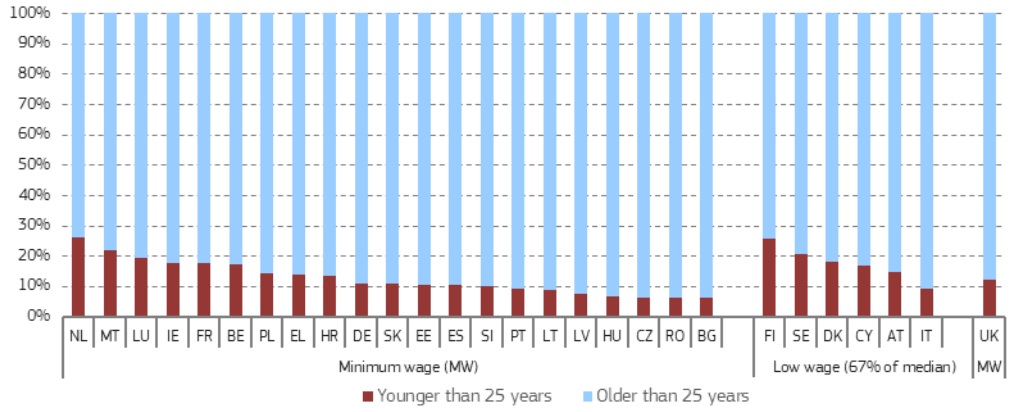
The majority of minimum wage earners are medium-skilled in most countries (Graph A7.3 (c)), despite the fact that low-skilled workers have a higher probability of earning the minimum wage (see Graph A7.2 (a)). But, as in the case of young workers, the share of low-skilled workers is relatively low in the overall workforce of most countries. The patterns are not uniform across countries: the majority of minimum wage earners is low-qualified in Portugal, Luxembourg and Malta. In turn, there is a relatively high share (more than 25%) of high-skilled workers among minimum wage earners in Ireland, Greece, Spain, and Slovenia.

Temporary and part-time work increases the likelihood of being a minimum wage worker (see Graph A7.2 (b)), but in most countries the majority of minimum wage earners work in standard jobs (Graph A7.3 (e) and (f)). This is because the share of temporary and part-time workers is low in the overall workforce. There are exceptions, however: temporary workers are the majority of minimum wage earners in Greece and Spain, while part-time workers constitute the majority in Belgium, Germany and the Netherlands.

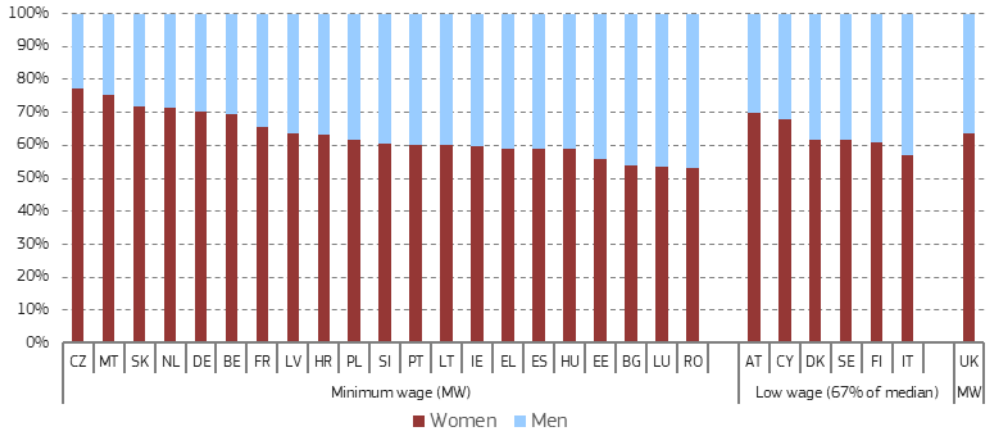
Single parents have a relatively high probability of being minimum wage earners (Graph A7.2 (b)). Nevertheless, most minimum wage earners live in households with at least two adults, including a similar share of couples with and without children (Graph A7.3 (d)). As in other cases, this is because of the relatively low share of single parent households among all households.

Graph A7.3: Characteristics of minimum wage earners by Member State (% of the MW earners), 2017

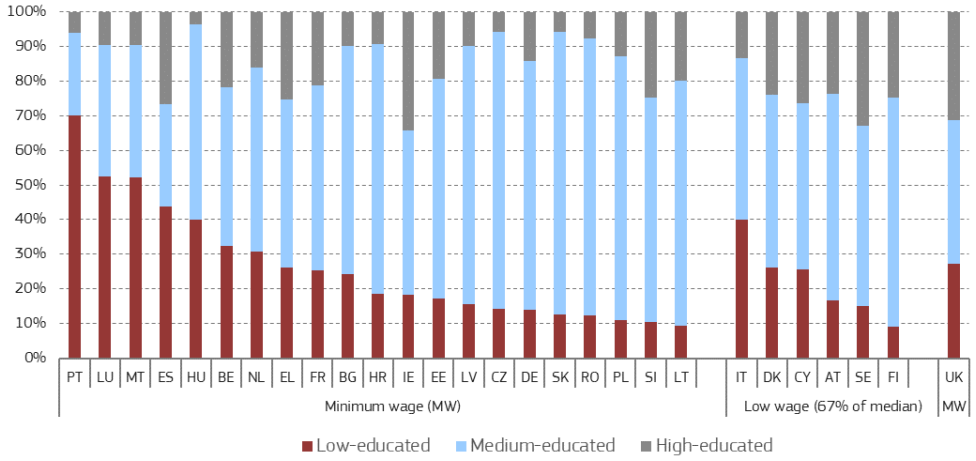
(a) Age



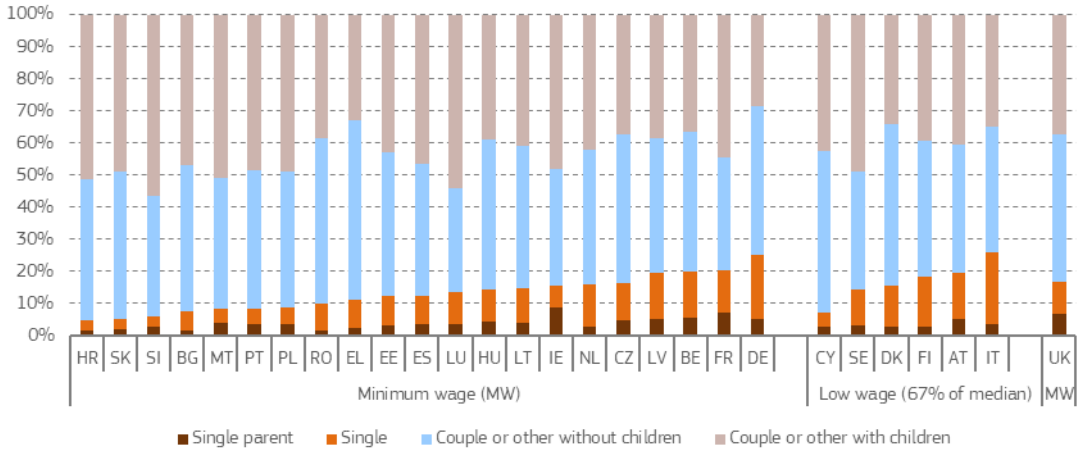
(b) Gender



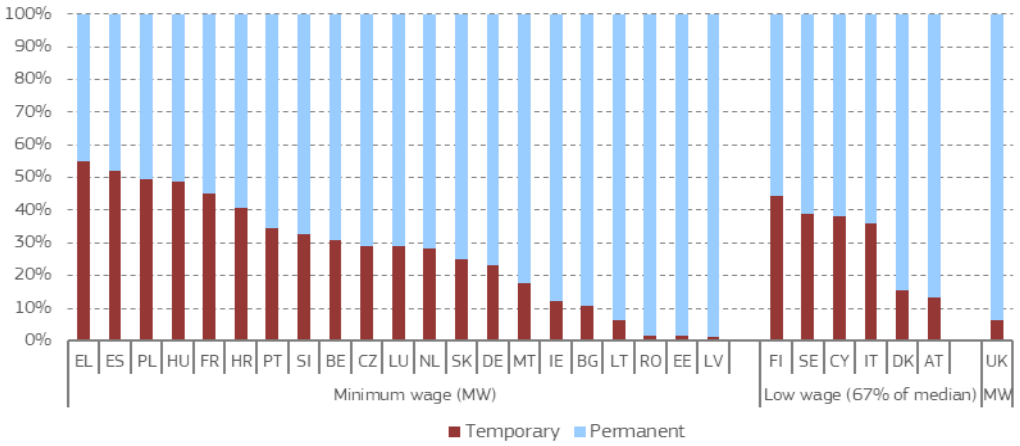
(c) Education level



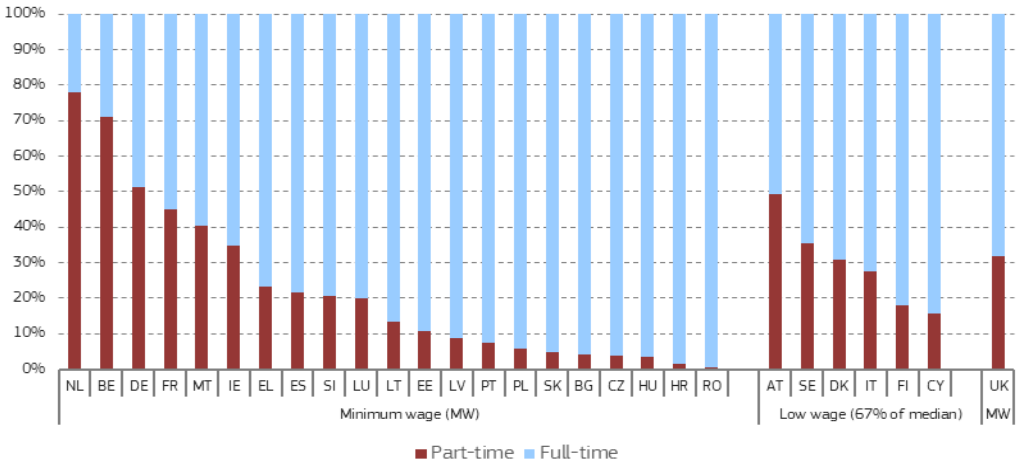
(d) Household type



(e) Type of contract



(f) Working pattern

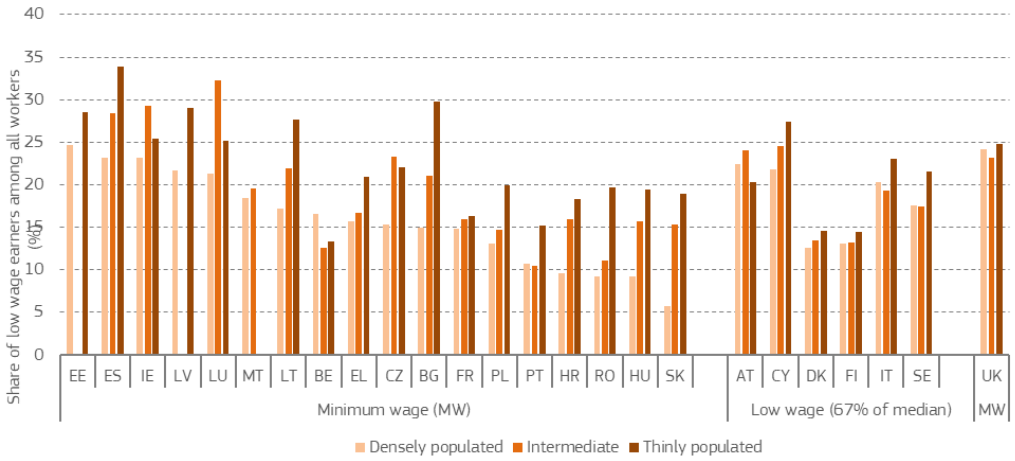


Note: For the Member States with a statutory national minimum wage, workers with wages between 80% and 105% of the minimum wage were considered. For the other Member States, low-wage workers (less than 67% of the median wage) were considered.
Source: European Commission calculations based on EU-SILC 2017.

A7.2. Where do minimum wage earners live and work?

Workers in less densely populated areas have a somewhat higher chance of being minimum wage earners but the differences between types of regions are small overall. On average across all Member States for which data are available, 14% of the employees living in thinly populated areas earn the minimum wage, while there is a lower share of minimum wage earners in intermediate (13%) and densely populated areas (11%). This is linked, among other things, to regional differences in the characteristics of workers as well as the location of various economic sectors (for instance, agriculture in rural areas and finance in dense ones). There are, however, significant differences between Member States (Graph A7.4). While in many countries the share of minimum wage earners is higher in less densely populated areas, the distribution is more even in others, e.g. Belgium, Czechia, and France. In other Member States, the share of minimum wage earners was highest in regions with an intermediate population density (rather than low density; e.g. in Austria, Ireland and Luxembourg).

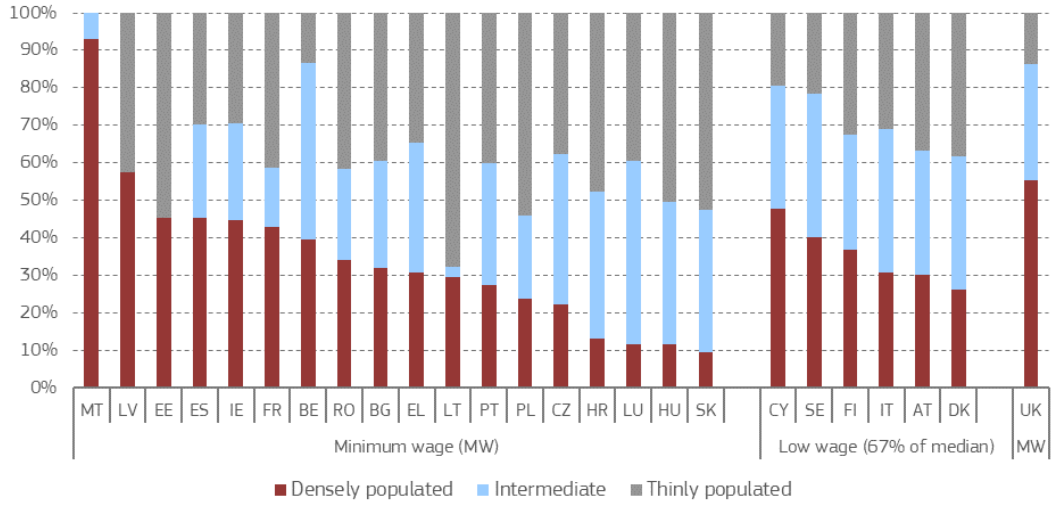
Graph A7.4: The share of minimum wage earners among all workers, by regions of high, intermediate and low density, 2017



Note: For the Member States with a statutory national minimum wage, workers with wages between 80% and 105% of the minimum wage were considered. For the other Member States, low-wage workers (less than 67% of the median wage) were considered.
Source: European Commission calculations based on EU-SILC 2017. The classification of regions has been done based on the degree of urbanisation variable DEGURBA in the database.

At the same time, depending on the regional distribution of the population, the regional distribution of minimum wage workers varies across countries. While in some Member States, the majority of minimum wage earners live in densely populated areas (Malta and Latvia), in others the majority lives in thinly populated areas (e.g. in Estonia, Hungary, Lithuania, Poland, and Slovakia; see Graph A7.5). Regions of intermediate population density have an important weight in Belgium, Luxembourg, but also in Czechia, Hungary and Slovakia. These patterns are the result of the regional distribution of the overall population and the probabilities reported in the previous graph.

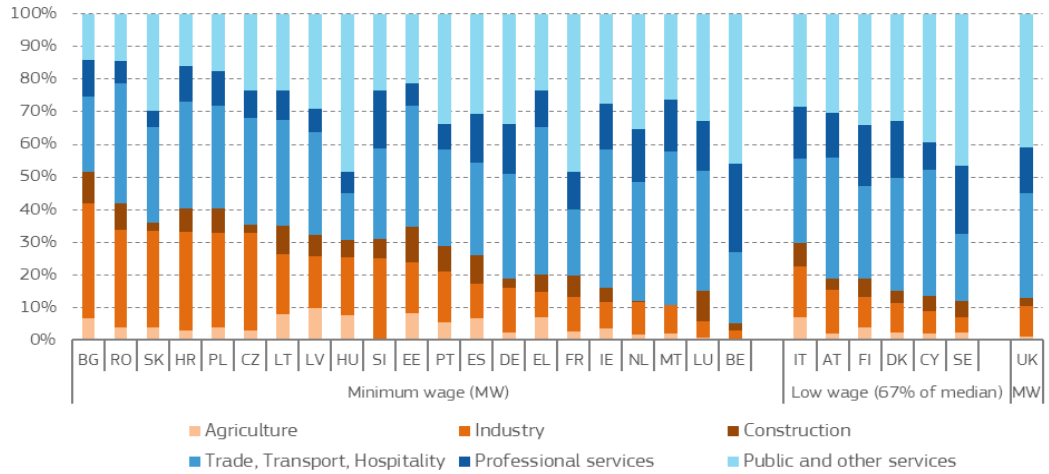
Graph A7.5: Distribution of minimum wage earners across regions of high, intermediate and low density, 2017



Note: For the Member States with a statutory national minimum wage, workers with wages between 80% and 105% of the minimum wage were considered. For the other Member States, low-wage workers (less than 67% of the median wage) were considered.
Source: European Commission calculations based on EU-SILC 2017. The classification of regions has been done based on the degree of urbanisation variable DEGURBA in the database.

In virtually all countries, the majority of minimum wage earners works in the services sectors (Graph A7.6). Industry and agriculture sectors employ a relatively small share of minimum wage earners in most countries, but this share is higher in some Central and Eastern European Member States. Industry accounts for a low share of minimum wage earners in some Member States (less than 10% in Belgium and Luxembourg), while its weight exceeds 30% in some Central and Eastern European Member States (such as Bulgaria, Czechia, Croatia, Slovakia, Poland, and Romania). The share of minimum wage earners in agriculture is less than 10% in all Member States. It is highest (above 7%) in Estonia, Hungary, Latvia, and Lithuania. This is because of the low share of agriculture in overall employment, but workers in this sector have a high probability of earning the minimum wage (see Graph A7.7 (a)).

Graph A7.6: Distribution of minimum wage earners by sector (% of the MW earners), 2017



Note: For the Member States with a statutory national minimum wage, workers with wages between 80% and 105% of the minimum wage were considered. For the other Member States, low-wage workers (less than 67% of the median wage) were considered. Employees are divided into six groups related to their sector of employment: Agriculture (NACE Rev. 2 sector code: A), Industry (B-E), Construction (F), Trade, Transport and Hospitality services (G-I), Professional services (J-N) and Public and other services (O-U).
Source: European Commission calculations based on EU-SILC 2017.

The food and accommodation (or hospitality) sector, a sector particularly affected by the Covid-19 pandemic, has a high share of minimum wage earners. The share of minimum wage earners is higher in services than in industry (see Graph A7.7 (a)), but it is particularly high in the food and accommodation sector, about twice as high as in services in general (see Graph A7.7 (b)). There is a great variety across countries, partly reflecting differences in the share of minimum wage earners at large. The share is highest (above one in four) in Croatia, France, Luxembourg, Portugal and Romania among countries with a statutory national minimum wage. In all countries without a statutory national minimum wage, the share of low-wage earners in the food and accommodation sector is one in three.

In a majority of Member States, workers in health and social services are less likely to earn the minimum wage than the average worker, but more likely than other workers in the public sector. The working conditions and pay of healthcare workers have received much attention in the context of the discussions about labour mobility in the EU,[214] and even more so during the Covid-19 pandemic. In most Member States, the share of minimum wage earners in the human health and social work sector is low (less than or close to 5%). But there are Member States where this share is high: it is above 15% in Luxembourg, Portugal and Romania (Graph A7.7 (c)). At the same time, while in

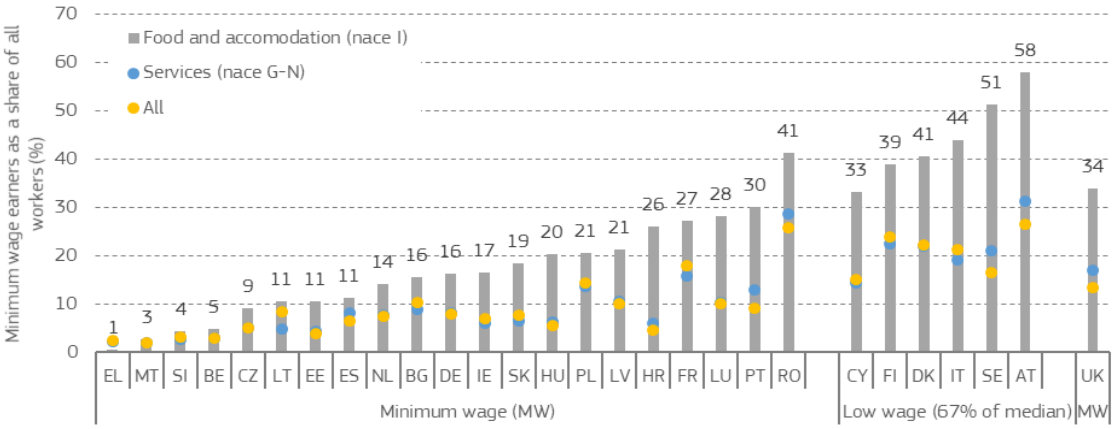
[214] See, e.g. Center for Policy Studies (CEPS), 2019: "EU mobile workers. A challenge to public finances?" Contribution prepared at the request of the Romanian Presidency of the Council of the European Union, presented at the informal ECOFIN meeting in Bucharest, 5-6 April, 2019.

a majority of Member States healthcare workers are less likely to be minimum wage earners than the average worker, the opposite is the case in particular in France, Luxembourg and Portugal. At the same time, in most Member States, healthcare workers are more likely to be minimum wage earners than workers in the public sector in general, except in Estonia and Hungary.

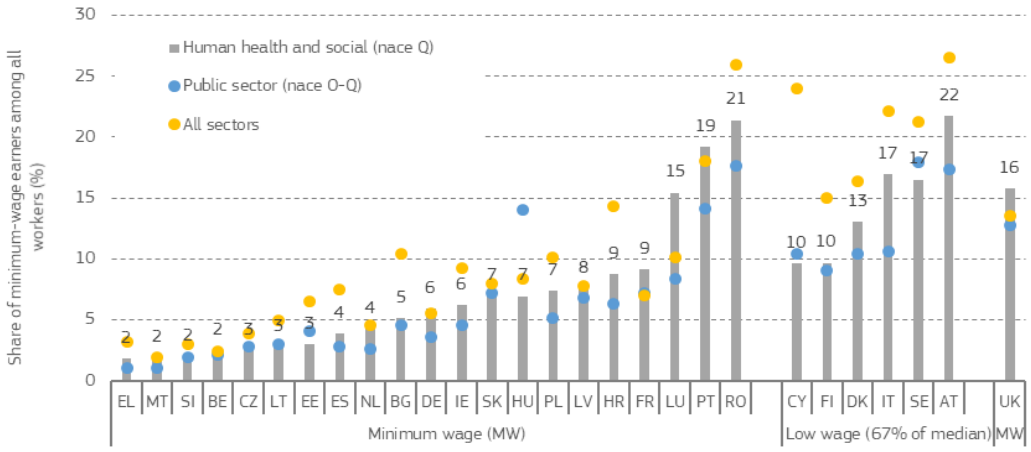
Graph A7.7: The share of minimum wage earners by sector, 2017

(a) By broad sectors of the economy

(b) The food and accommodation sector among other services sectors



(c) The public sector and the human health and social work sector



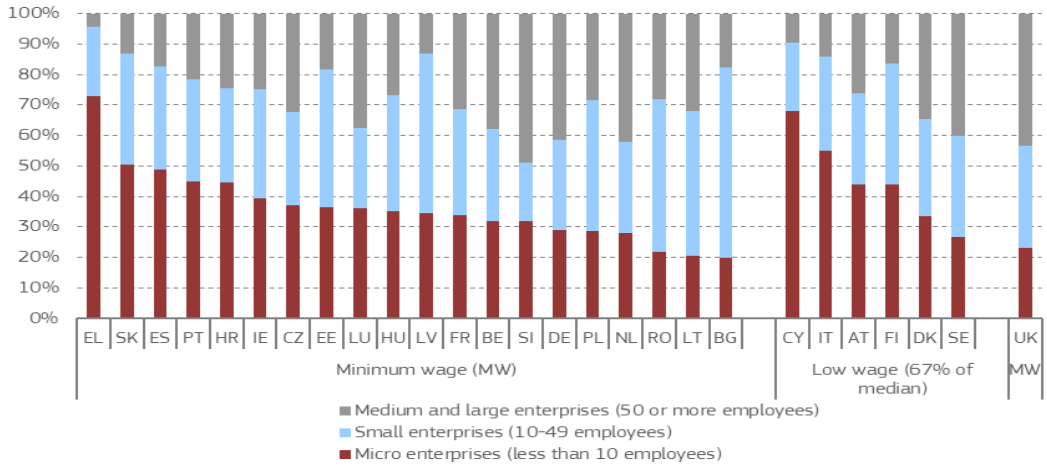
Note: For the Member States with a statutory national minimum wage, workers with wages between 80% and 105% of the minimum wage were considered. For the other Member States, low-wage workers (less than 67% of the median wage) were considered.
Source: European Commission calculations based on EU-SILC 2017.

SMEs comprise three different categories of enterprises, namely micro-enterprises (less than 10 employees), small enterprises (between 10 and 49 employees) and medium-sized enterprises (between 50 and 250 employees).[215] In 2016, SMEs represented 99 % of all enterprises in the EU. They accounted for around two-thirds of total employment in the EU, ranging from 47 % in the United Kingdom to 85 % in Malta.

Micro and small enterprises employ a majority of minimum wage earners but there is a variety of patterns across the EU. Firms with less than 50 workers employ more than 80% of minimum wage earners in Bulgaria, Estonia, Greece, Latvia, Slovakia and Spain (as well as in Cyprus, Finland and Italy, in the case of low-wage earners) while their weight is below 60% in Germany, the Netherlands and Slovenia (Graph A7.8). There is also a variety of patterns related to the relative weight of micro and small enterprises. Micro enterprises employ a majority of minimum wage earners in Greece and Slovakia (as well as Cyprus, and Italy in the case of low-wage earners). In contrast, their weight is only about 20% in Bulgaria, Lithuania and Romania.

[215] Commission Recommendation of 6 May 2003 concerning the definition of micro, small, and medium-sized enterprises. (2003/361/EC), *Official Journal of the European Union*, L 124/36, 20 May 2003.

Graph A7.8: The distribution of minimum wage earners, by firm size (%), 2017



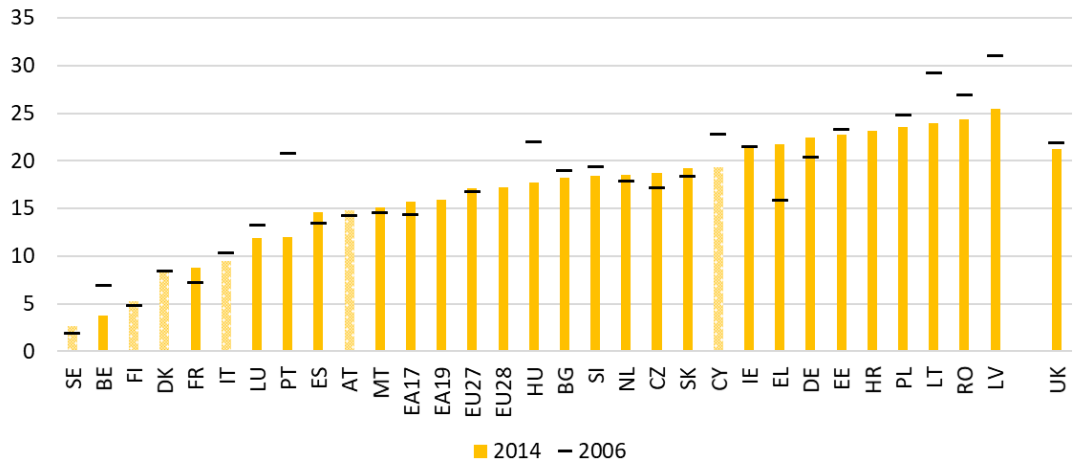
Note: Minimum wage earners are those whose observed full-time equivalent gross monthly wage ranges between 80% and 105% of the monthly minimum wage.
Source: European Commission calculations based on EU-SILC 2017.

Annex 8 Problem definition: Additional information

A8.1. Adequate minimum wages protect low-wage earners

Evidence shows that minimum wages help reduce wage inequality, through two effects.[216] Through an immediate effect, the wages of workers who would otherwise earn less than the minimum wage are raised to the minimum wage, improving their purchasing power. In addition, minimum wages also have "spill-over effects" on higher wages, further reducing wage inequality. European Commission analysis shows that, across EU Member States between 2006 and 2014, minimum wage increases significantly affected the wages of the lowest fifth of the wage distribution.[217] Research indicates that minimum wages reduce wage inequality both across EU Member States and in the US.[218] Between 2006 and 2014, the share of low-wage earners rose from 16.7% in 2006 to 17.2% in 2014, with significant variation across Member States (Graph A8.1).

Graph A8.1: Share of low-wage earners, 2006-2014



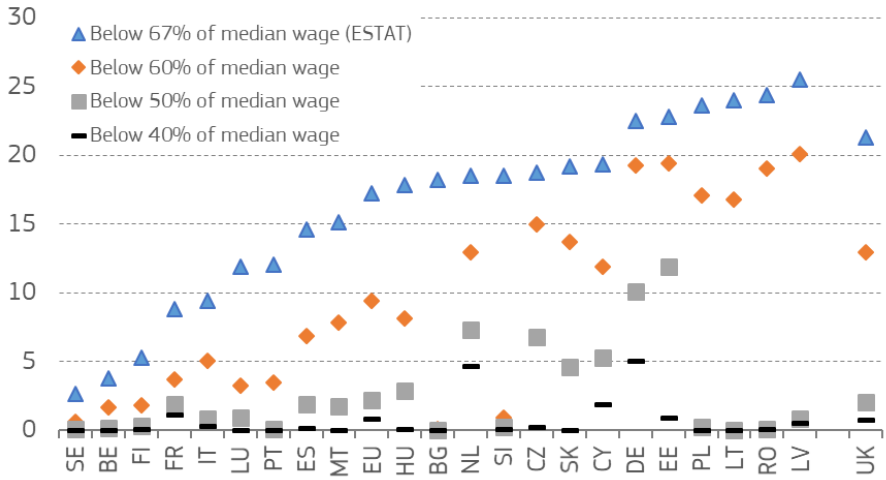
[216] Impacts on in-work poverty have been demonstrated both for EU Member States and in the US. For evidence on EU Member States, see, Pereira, M.R. and A. Galego (2019): "Diverging trends of wage inequality in Europe", Oxford Economic Papers, 2019, 1-25. For recent evidence on the U.S., see Autor, D. H., Manning, A., & Smith, C. L. (2016), "The contribution of the minimum wage to US wage inequality over three decades: A reassessment", American Economic Journal 8(1): 58–99.

[217] European Commission (2018): "Labour market and wage developments in Europe, Annual Review 2018", Directorate-General for Employment, Social Affairs and Inclusion, pp. 134-135.

[218] For evidence on EU Member States, see, Pereira, M.R. and A. Galego (2019): "Diverging trends of wage inequality in Europe", *Oxford Economic Papers*, 2019, 1-25. For recent evidence on the U.S., see Autor, D. H., Manning, A., & Smith, C. L. (2016), "The contribution of the minimum wage to US wage inequality over three decades: A reassessment", *American Economic Journal* 8(1): 58–99.

Note: Low-wage earners are defined as those employees (excluding apprentices) who earn two thirds or less of the national median gross hourly earnings. Data in the Structure of Earnings Survey includes firms with ten or more employees.
Source: Structure of Earning Survey [earn_ses_pub1s].

Graph A8.2: Share of low-wage workers: various thresholds, 2014



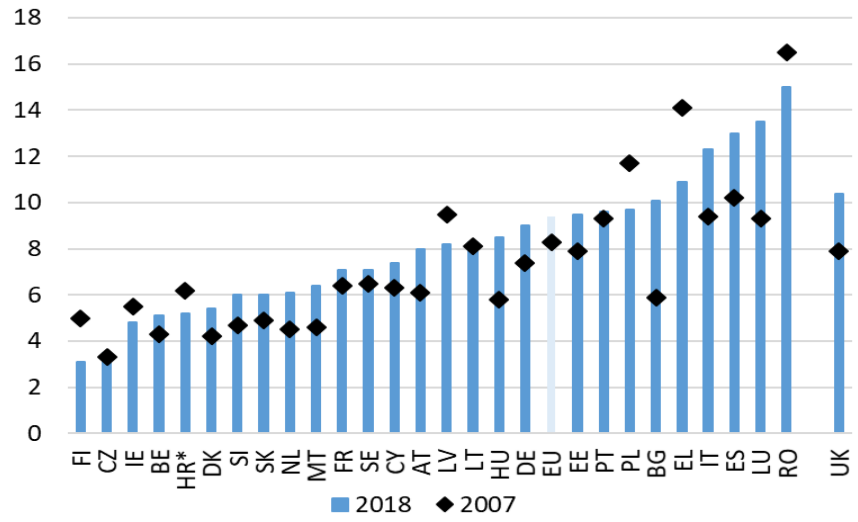
***Note*:** The calculations are based on the gross hourly earnings. The Structure of Earnings Survey includes firms with 10 or more employees.
***Source*:** Eurostat (share of workers below 67% of median, [earn_ses_pub1s]) and European Commission calculations based on EU-Structure of Earnings Survey 2014 (rest of the indicators).

Minimum wage increases also improve the situation of the families of low-wage earners and contribute to reducing in-work poverty. The effects of the minimum wage on income inequality and poverty are related to the composition of families. Whereas families with at least one low-wage earner can expect to benefit from an increase in the minimum wage, some poor families that include unemployed, inactive or self-employed adults do not benefit from the income protection provided by minimum wage policies.[219] Nevertheless, minimum wage policy, combined with the effect of tax and benefits systems, may have an impact on poverty and in particular on in-work poverty.[220] In particular, previous analysis by the European Commission has found that a 10% increase in the minimum wage would reduce aggregate poverty in almost all Member States.[221] Recent academic research confirms the redistributive effect of minimum wages, taking into account second-round macro-economic effects, including on consumer prices.[222] Finally, minimum wages may also contribute to a better safety and security of workers, notably insofar as an adequate minimum wage would avoid

[219] For an overview of this issue, see Brown, C. (1999): "Minimum wages, employment and the distribution of income", in: Ashenfelter O. and D. Card (eds.): *Handbook of Labor Economics*, Volume 3, Chapter 32.
[220] Peña-Casas, R., D. Ghailani, S. Spasova and B. Vanhercke (2019): *"In-work poverty in Europe: A study of national policies"*, European Social Policy Network.
[221] European Commission (2016): "Labour market and wage developments in Europe: Annual Review 2016", Directorate-General for Employment, Social Affairs and Inclusion, Section II.1.4.
[222] See, for instance on simulations included in Harasztosi and Lindner (2019): "Who pays for the minimum wage?" *American Economic Review*, Vol. 109(8): 2693–2727.

situations where workers have to cumulate several jobs or work extensive hours to make ends meet.

Graph A8.3: In-work poverty in the EU, 2007 and 2018 (%)



Notes: Employed persons, aged 18-64. For Croatia, the first observation is from 2010 instead of 2007.
Source: Eurostat, in-work at-risk-of-poverty rate by age and sex - EU-SILC survey [ilc_iw01].

A8.2. Adequacy of minimum wages: Additional indicators and analysis

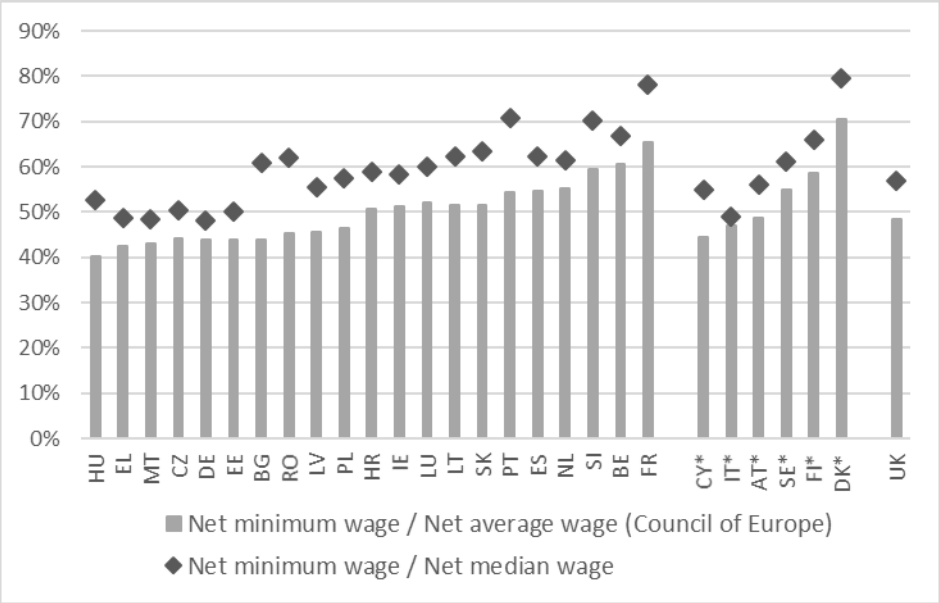
Minimum wage adequacy has two main dimensions. First, their fairness with respect to the wages of other workers in the same country and, second, their capacity to provide workers with a decent standard of living, relative to the income of other groups or in absolute terms. Various indicators aim to measure these aspects of minimum wage adequacy. Some adequacy indicators compare gross minimum wages to the gross median or average wage. These comparisons allow assessing whether a minimum wage is fair compared to the wages of other workers in the same country and thus are also informative about the effect of minimum wages on wage inequality. Other indicators assess the take-home pay of minimum wage earners against a reference income. These indicators allow a closer look at what minimum wage earners can afford. The reference income can be relative to the income of other groups in society, or an absolute measure of a decent living standard. The following sections present a series of indicators, related to both dimensions of adequacy.

In addition, in a number of Member States, minimum wages also fall short of the standard of decent living defined by the Council of Europe. The Council of Europe's 1961 European Social Charter (ESC) established the human right of all workers "to a fair remuneration sufficient for a decent standard of living for themselves and their families". Its monitoring Committee (European Committee of Social Rights) proposed that wages should be at least 60% of national average net earnings, with a secondary target of 50%. The take-home pay of single workers earning the minimum wage is below 50% of the net

average wage in Hungary, Greece, Malta, Bulgaria, Germany, Estonia, Czechia, Romania, Latvia and Poland and below 60% (but not below 50%) in Croatia, Ireland, Slovakia, Lithuania, Luxembourg, Portugal, Spain, the Netherlands and, to a small degree, Slovenia (Graph A8.4).

An additional variant of this indicator shows the take-home pay of single workers earning the minimum wage as a share of the national median net earnings. This latter is below 50% in Germany, Malta and Greece and below 60% (but not below 50%) in Estonia, Czechia, Hungary, Latvia, Poland, Ireland and Croatia (Graph A8.4).

Graph A8.4: Net minimum wage over net average wage and net median wage, single childless person not entitled to social assistance and housing benefits, 2019



Source: European Commission calculations based on OECD TaxBen model. Comparable wages set in collective agreements in Member States without statutory minimum wages (marked by *) were taken from Eurofound (2020): Minimum wages in 2020 – Annual Report.

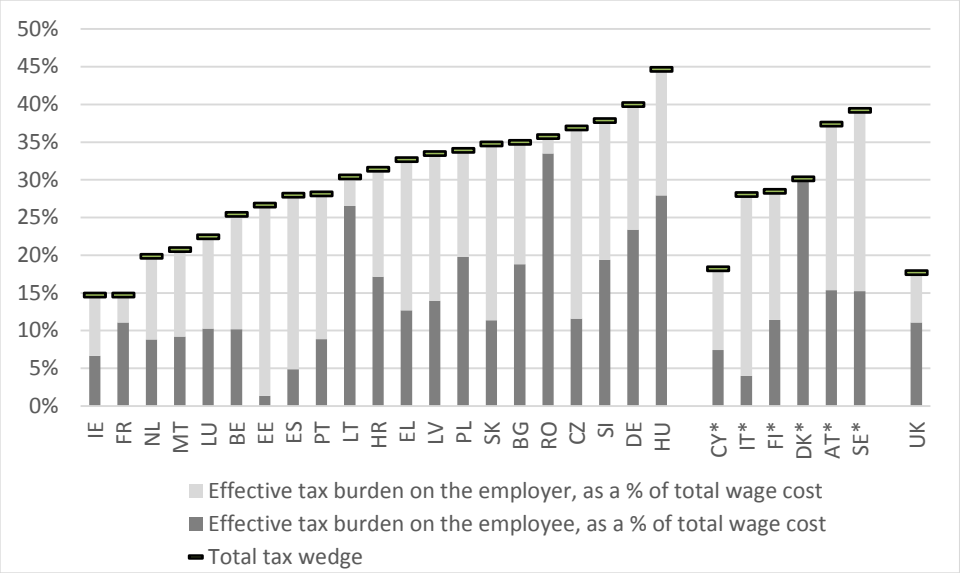
Minimum wages interact with other policies, including taxes and benefits, to affect the living standards of minimum wage earners. Personal income taxes and social security contributions can significantly reduce the take-home pay of minimum wage earners. Evidence shows that over the last decade (2008-2019), reforms of the tax-benefit system tended to reduce income inequality and the at-risk-of-poverty rate.[223] In particular, the total tax wedge[224] at the minimum wage level is relevant for ensuring adequate income support to minimum wage workers and their families but also for avoiding a too high burden on employers, which can result in job losses. The tax wedge

[223] European Commission (2019): LMWD 2019 Report, DG EMPL; available at: https://op.europa.eu/en/publication-detail/-/publication/439aaf5c-0435-11ea-8c1f-01aa75ed71a1/language-en/format-PDF/source-119740004

[224] The tax wedge is defined as the sum of personal income taxes and social security contributions paid by employees and employers, divided by total wage cost. This indicator can be evaluated at various wage levels.

level on minimum wage earners as well as the distribution of burden between employees and employers vary significantly in the EU. The tax wedge ranges from below 20% of the total wage cost in Ireland, France and the Netherlands to 45% in Hungary (Graph A8.5). Romania is the country with the highest tax burden on employees while Estonia and Czechia have the highest burden on employers.

Graph A8.5: The tax wedge at the minimum wage and its components, 2019



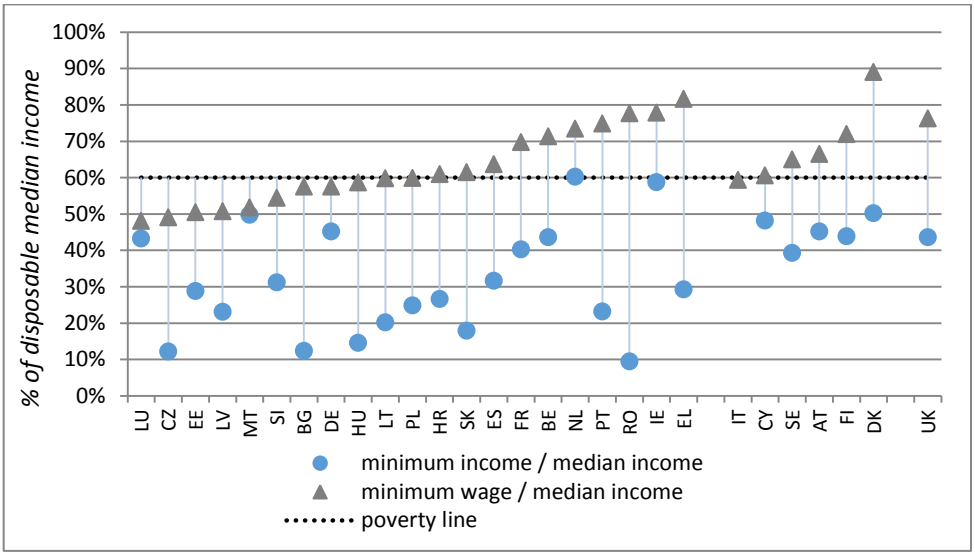
Note: * Comparable wages set in collective agreements in Member States without statutory minimum wages (marked by *) were taken from Eurofound (2020): Minimum wages in 2020 – Annual Report.
Source: Commission calculations based on OECD TaxBen data. Total wage cost is evaluated for a single worker with no children.

The distance between the net minimum income[225] and the net minimum wage as a share of the median disposable household income is a measure of financial incentives to seek a job. These depend on how much income an individual loses as he or she moves from inactivity (being eligible for minimum income benefits) to a job which pays the minimum wage.[226] Therefore, it is beneficial to set minimum wages and minimum income benefits in a coordinated way in order to maintain work incentives, while improving their impact on poverty reduction. In particular, if minimum wages are set at too low levels as compared to the attainable benefits, they risk becoming irrelevant as firms may have to offer higher wages to attract workers. In some countries (Malta,

[225] In line with indicators agreed by the EU Social Protection Committee (https://ec.europa.eu/social/main.jsp?catId=758) for minimum income benchmarking, minimum income levels are identified based on the OECD TaxBEN model (http://www.oecd.org/social/benefits-and-wages/). This model refers to minimum income benefits as cash benefits "that aim at preventing extreme hardship and employ a low-income criterion as the central entitlement condition".
[226] To be noted that the comparison between minimum income schemes and minimum wages is not the only possible comparison relevant for the incentive effects of minimum wages. In particular, not all people who might consider taking up a minimum wage job receive minimum income benefits. People in other circumstances include those on unemployment or disability benefits or those not eligible for the minimum income benefit (e.g. because their partner is working).

Luxembourg, Germany, the Netherlands and Ireland), minimum income and minimum wage levels are close to each other and therefore work incentives may be weak in some cases (Graph A8.6).[227] In other countries (Romania, Greece and Portugal), the difference between the minimum income benefit and the minimum wage is high, suggesting that minimum income schemes may not be effective as income replacement systems. In addition, across all Member States but Ireland, and the Netherlands, single childless people receiving the minimum income are generally at risk of poverty meaning that minimum income schemes usually do not lift recipients out of poverty.

Graph A8.6: Net household income of a single childless person receiving the minimum income or earning the minimum wage relative to the median disposable household income, 2018



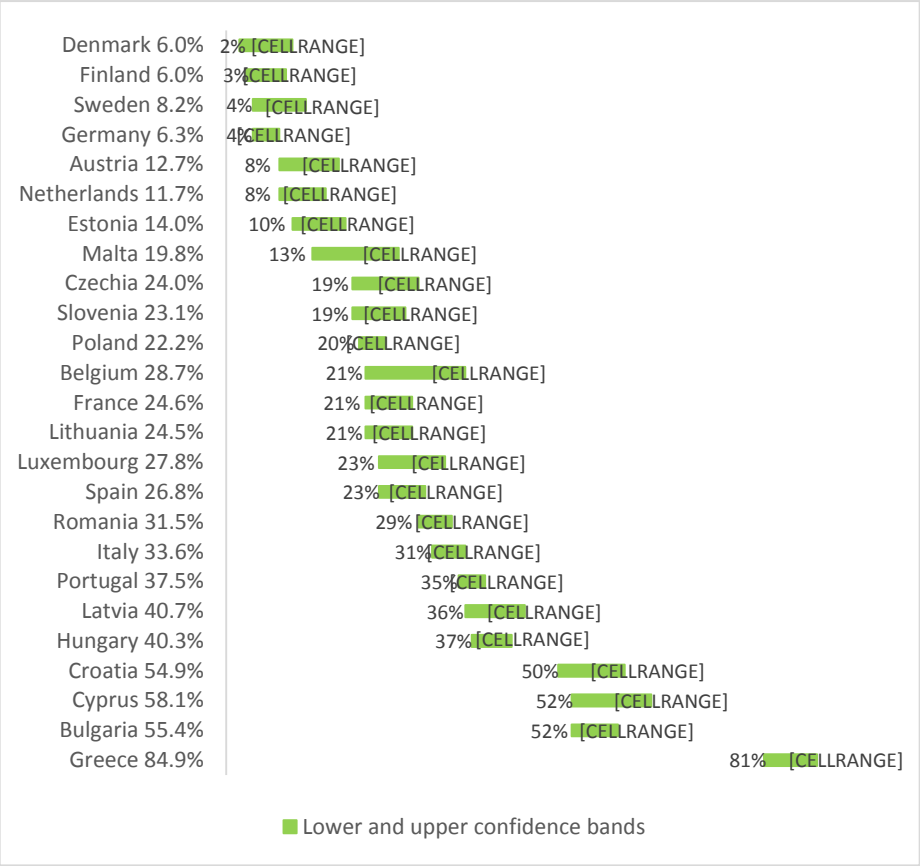
Note: The single childless minimum income earner considered in the Graph is entitled to housing benefits (if available) which top-up the social assistance benefits. The single minimum wage worker is not entitled to social assistance and housing benefits. *Figures for countries that do not have a statutory minimum wage in place refer to comparable collective agreements and are provided by Eurofound.
Source: Own calculations based on OECD TaxBen model. Median incomes are based on Eurostat flash estimates for BE, DE, ES, FR, IE, LT, LU, MT, PT, SK, UK, CY and IT. For all other countries, official Eurostat median incomes have been used.

A large proportion of minimum wage workers say they find it hard to make ends meet; however, there is a wide difference across countries. The proportion of minimum wage workers who find it difficult to make ends meet ranges from 6% in Denmark and above 10% in the Netherlands and Austria to proportions near or above 50% in Croatia, Cyprus, Bulgaria and Greece (see Graph A8.5). Overall, the proportion tends to be higher in countries where GDP per capita, wages, and minimum wages are lower, but there is no perfect correlation. Countries with a high ratio of the minimum to

[227] The graph reflects the situation for single childless families. Clearly, the variation in minimum income benefits with family size play an important role for determining work incentives.

the median wage tend to have lower shares of low earners reporting difficulties, but the effect is intermediated by the tax and benefit system and demographic factors.

Graph A8.7: Proportion of minimum wage workers who find it difficult to make ends meet, 2018

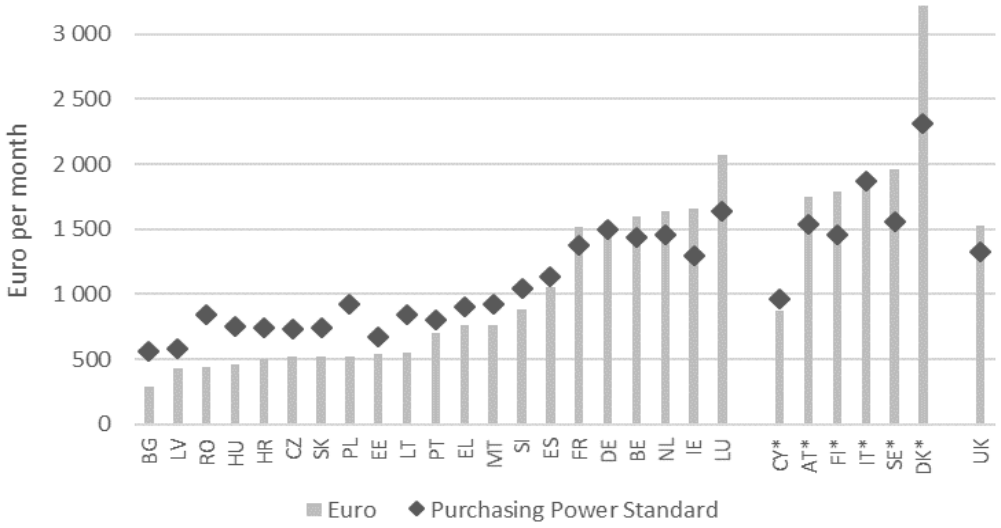


Note: Responses to the survey question 'Thinking of your household's total monthly income, is your household able to make ends meet …?' The graph shows the sum of those answering 'with difficulty' and 'with great difficulty'. Minimum wage earners. As these estimates are based on a sample, the lower and upper confidence bands indicate the range within which the true value lies at a 95% confidence level. For some countries, this interval can be relatively large, due to smaller samples. Caution should therefore be exerted when interpreting and comparing these figures.
Source: Eurofound calculations based on the EU-SILC 2018.

There are wide differences between the purchasing power of minimum wages across Member States. In 2019, statutory minimum wages in the EU ranged from EUR 286 in Bulgaria to EUR 2071 in Luxembourg. Taking into account the differences in price levels between Member States (a comparison in "Purchasing Power Standard"), the difference between the lowest and highest statutory minimum wages is about one to three (Graph A8.8). Wages set in collective agreements for low-paid occupations in countries

relying on collective bargaining are comparatively high when compared to statutory minimum wages in other countries.[228]

Graph A8.8: Minimum wage levels, gross monthly figures, expressed in euro and Purchasing Power Standard (PPS), 2019

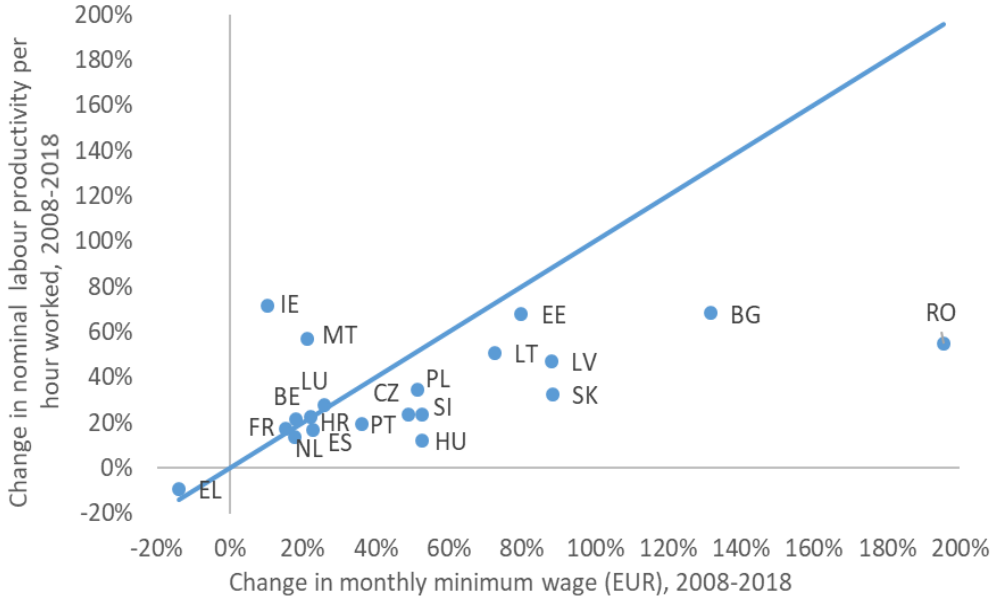


Notes: * For AT, CY, DK, FI, IT and SE, information on comparable wages set in collective agreements was taken from Eurofound (2019): "Minimum wages in 2019 - Annual review", Figure 3, while information on PPS was taken from the European Commission's AMECO database.
Source: Eurostat [monthly minimum wages; earn_mw_cur], Eurofound and AMECO.

The statutory minimum wage has increased faster in low-wage countries, even as compared to other wages or compared to productivity growth. This is illustrated by Graph A8.9 which plots the change in labour productivity against the change in the monthly minimum wage between 2008 and 2018. In only two countries (Ireland and Malta) the minimum wage significantly lagged behind labour productivity.[229] In a few other countries (Belgium, Croatia, France, Greece, and Luxembourg), the minimum wage lagged behind productivity growth to a small degree. In the other Member States, the minimum wage grew faster than productivity, especially in Eastern European Member States. The minimum wage tripled in Romania in euro terms, more than doubled in Bulgaria, and almost doubled in Slovakia and Latvia, showing a significantly faster growth than GDP per hour worked.

[228] When controlling for the level of economic development, Boeri (2012) finds that collective bargaining involves a 12-13 percentage points higher ratio of the minimum wage to the average wage. See Boeri, Tito: "Setting the minimum wage", *Labour Economics*, Vol. 19 (3), June 2012, Pages 281-290.
[229] In the case of Ireland, this is partly due to statistical reasons, i.e. an upward revision of GDP in 2015.

Graph A8.9: Changes in labour productivity and changes in the minimum wage, both in current euro, 2008-2018

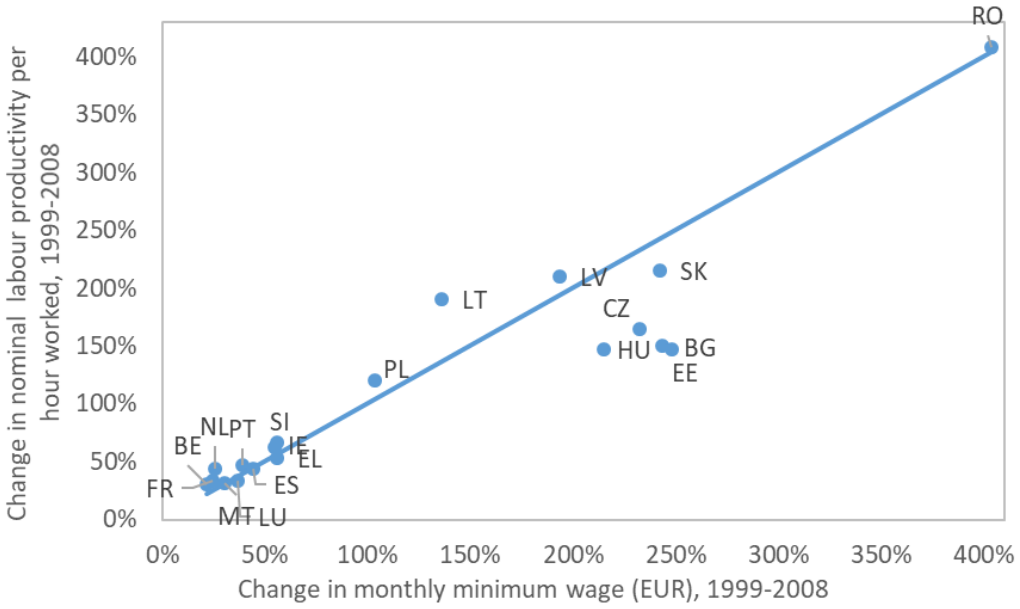


Notes: Ireland is a statistical outlier, partly because its GDP was revised upwards in 2015.
Source: Monthly minimum wage in euro: Eurostat; GDP per hours worked in current prices, expressed in euro: AMECO database of the European Commission.

Developments in the previous decade (1999-2008) show a more varied picture, but overall, they also contributed to a convergence in wages and in particular minimum wages (see Graph A8.10). Between 1999 and 2008, the minimum wage grew significantly ahead of productivity growth in Bulgaria, Czechia, Estonia, Hungary and Slovakia, but behind productivity growth in Latvia, Lithuania and Poland. Meanwhile, the minimum wage significantly lagged behind productivity in some Western European Member States, in particular in the Netherlands, but also in Belgium, France, and Portugal. Despite this trend towards convergence in the last two decades, a large gap remains between the lowest and the highest nominal minimum wages in the EU (Graph A8.10).[230]

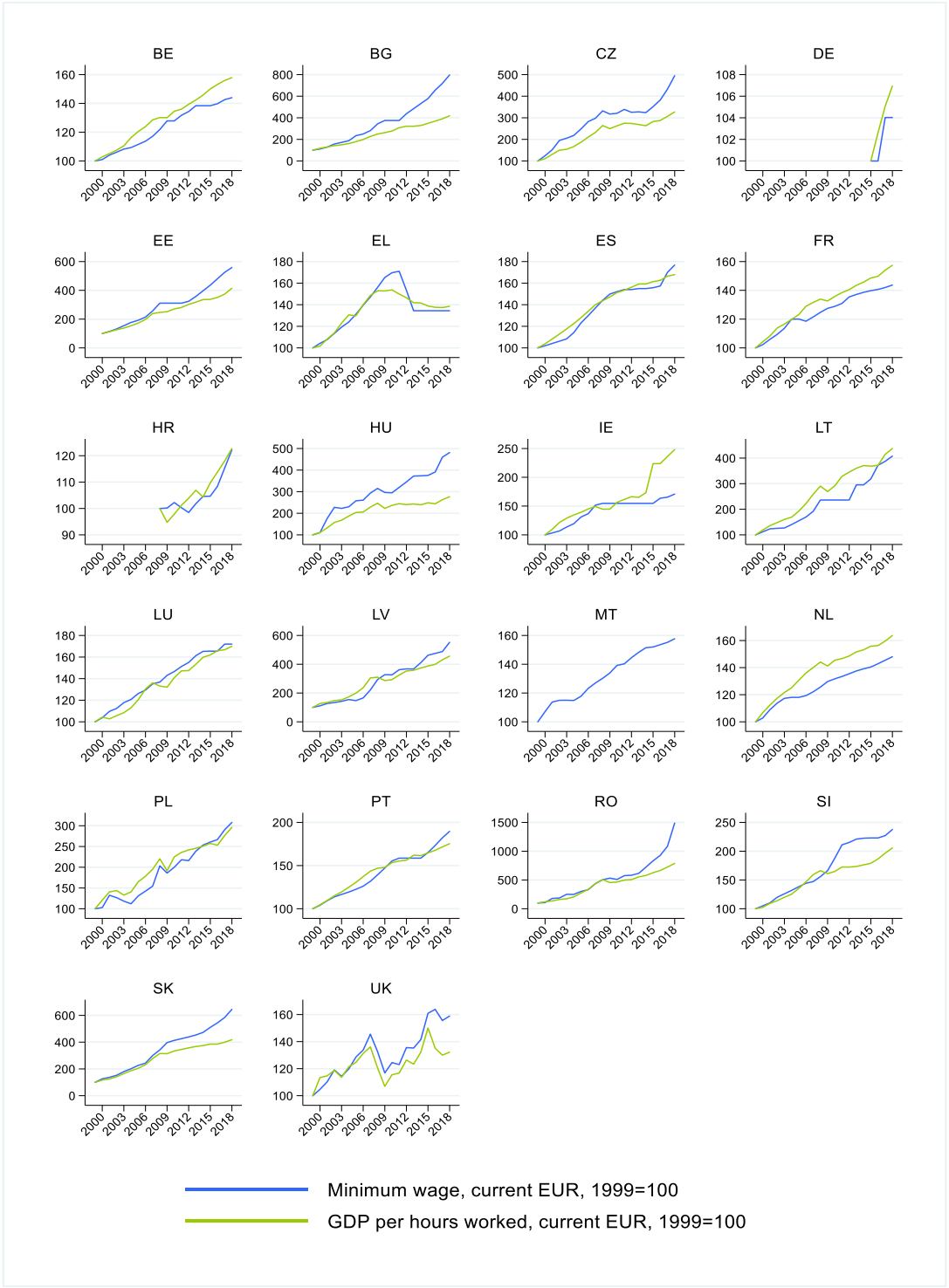
[230] The ratio between the purchasing power of the lowest and highest minimum wage in the EU has narrowed from roughly one-to-six in 2010 to one-to-three in 2019. See Eurofound: Minimum wages in 2019: Annual review, p. 8.

Graph A8.10: Changes in labour productivity and changes in the minimum wage, both in current euro, 1999-2008



Source: Monthly minimum wage in euro: Eurostat; GDP per hours worked in current prices, in euro: AMECO database of the European Commission.

Graph A8.11: Statutory minimum wages and labour productivity in EU Member States, 1999-2018, 1999=100



Note: Both variables expressed as index numbers: 1999 = 100, except for Estonia and Ireland (2000=100), Croatia (2008=100) and Germany (2015=100). Both indices were created based on variables expressed in current euro.
Source: European Commission calculations based on Eurostat and AMECO data.

Annex 9 Internal drivers: Additional information

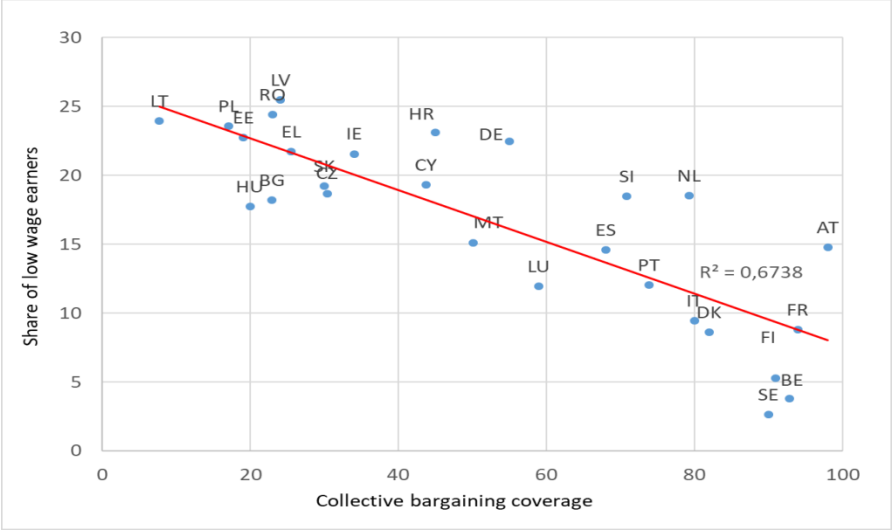
A9.1. Declining trend in collective bargaining

Collective bargaining affects both the adequacy and coverage of minimum wages. In countries where minimum wage protection is provided by collective agreements, the share of protected workers is directly determined by the share of workers covered by collective bargaining agreements ("collective bargaining coverage").[231] In countries with statutory minimum wages, collective bargaining has a strong effect on minimum wage adequacy, often ensuring wages above the minimum level set by law. Moreover, in 15 Member States wage updates are directly or indirectly linked to general wage developments, which in turn are driven by collective agreements. Namely in Belgium, France, Luxembourg, the Netherlands, and Slovenia, the automatic indexation of statutory minimum wages takes into account developments in wages and labour costs, while in Germany, Czechia, Croatia, Ireland, Greece, Latvia, Malta, the Netherlands, Poland and Slovakia the law defines either formulas, variables or targets to update the statutory minimum wage that take into account wages.

Countries with a higher collective bargaining coverage tend to have lower wage inequality and higher wages. Collective bargaining sets the terms of employment and working conditions of a large share of workers. Sectoral and multi-level collective bargaining systems are associated with lower wage inequality, by around 20-25 percent.[232] As a result, high collective bargaining coverage is associated with lower shares of low-wage workers (Graph A9.1). In addition, decreases in collective bargaining coverage have been found to have a negative, although transitory, effect on wage growth.[233] Correspondingly, high collective bargaining coverage is associated with a somewhat higher share of income going to labour (Graph A9.2).

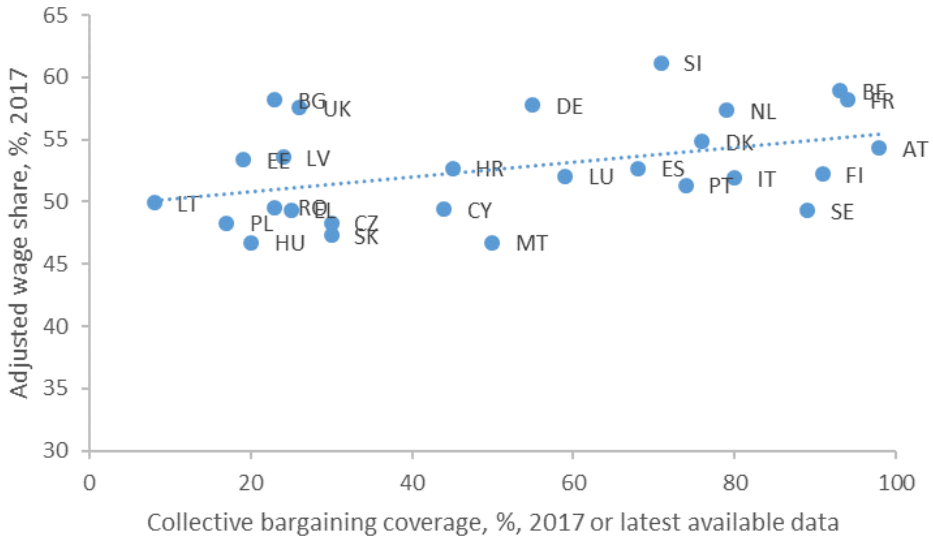
[231] Measurement issues related to collective bargaining coverage are discussed in Annex A4.6.
[232] OECD (2018)," The role of collective bargaining for good labour market performance", Employment Outlook 2018, Paris.
[233] See European Commission (2018): "Labour market and wage developments in Europe, Annual Review 2018" DG EMPL, Chapter II.1.

Graph A9.1: Collective bargaining coverage and the share of low-wage workers



Source: Collective bargaining coverage: ICTWSS database, Version 6.1, University of Amsterdam. Variable AdjCov (# 111). Share of low-wage workers: Eurostat, Structure of Earnings Survey.

Graph A9.2: Collective bargaining coverage and wage share

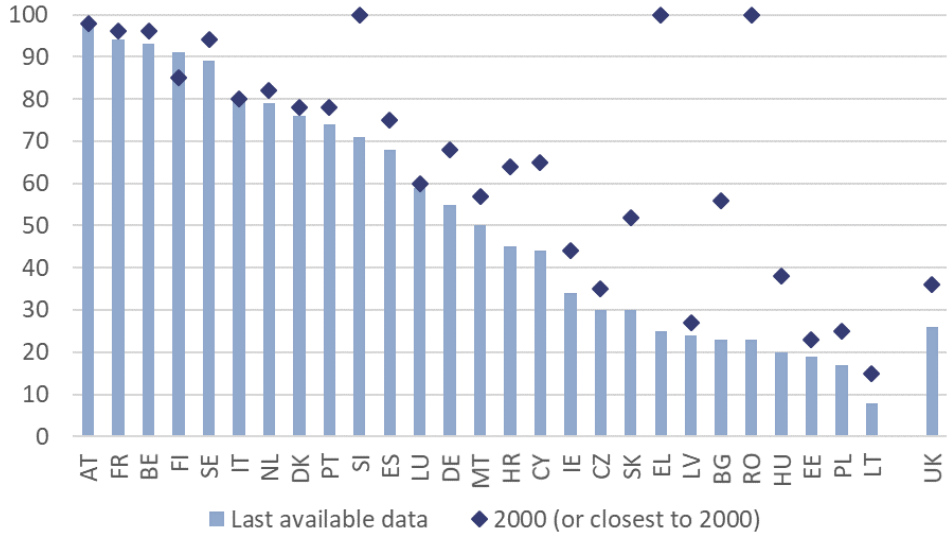


Note: Ireland is not included in the graph as its adjusted wage share is an outlier.
Source: Collective bargaining coverage: ICTWSS database, Version 6.1, University of Amsterdam. Variable AdjCov (# 111). Adjusted wage share: AMECO database of the European Commission.

Collective bargaining coverage shows a decreasing trend in many EU Member States in recent years (Graph A9.3). In most of the countries where minimum wages are set through collective bargaining, the level of coverage is at or above 80%, and while a significant decrease can be seen in Cyprus, coverage has not declined on average in these countries. In countries with a statutory national minimum wage, the coverage rate is very

diverse, ranging from less than 20% in Estonia, Lithuania and Poland to above 80% in Belgium. The overall negative trend of collective bargaining coverage in the EU is driven by the structural shifts in the economy towards less-unionised sectors, notably services, and by a sharp decline in trade union membership related to the increase of non-standard forms of work. Coverage is high in those Member States where bargaining takes place at national or industry level. Key to attaining high coverage are well-organized social partners with a broad support base.

Graph A9.3: Collective bargaining coverage in the EU, 2000-2018



Notes: Observations closest to 2000 include 1997 (FR), 2001 (LV), 2002 (BG, LT, MT), 2003 (EE). Latest available data are: 2011 (DK); 2013 (SE); 2014 (LV); 2015 (FR, PL, SK); 2016 (CY, FI, BE, BG, CZ, EL, MT, PT, RO, SI); 2017 (DE, ES, HR, HU, IE, LT, LU, NL, UK); 2018 (AT, IT).
Source: ICTWSS database, Version 6.1, University of Amsterdam. Variable AdjCov (# 111). Definition: employees covered by valid collective (wage) bargaining agreements as a proportion of all wage and salary earners in employment with the right to bargaining, expressed as percentage, adjusted for the possibility that some sectors or occupations are excluded from the right to bargain.

Some of the countries where coverage has significantly declined have chosen to introduce a statutory minimum wage. This includes Germany in 2015 (where collective bargaining coverage had decreased from 68% in 2000 to 58% in 2014) and Ireland in 2000. In these two Member States, trends in collective bargaining coverage were not significantly affected by the newly introduced statutory minimum wage. In Germany, in the years since its introduction, the minimum wage has had a differential effect on collective bargaining in various sectors.[234] First, it has had a strong impact on wages in sectors with low wages and low collective agreement coverage. Second, it has served as a point of reference for the collective bargaining partners in sectors with low wages but with collective agreement coverage (i.e. the national minimum wage has an

[234] These conclusions are based on Dingeldey, Irene (2019): Wechselwirkungen zwischen Mindestlohn und Tariflohn: Verschiedene Typen im Branchenvergleich. In: *Arbeit. Zeitschrift für Arbeitsforschung, Arbeitsgestaltung und Arbeitspolitik*, Vol. 28(1), pp. 55-72.

increasing effect on wages set in collective agreements. Finally, minimum wages do not seem to have had a significant effect in sectors with agreed wages above the minimum wage level where collective bargaining coverage is in the medium or high range. While the overall declining trend in collective bargaining continued after the introduction of the minimum wage, first evidence found no statistically significant impact of the minimum wage on collective bargaining coverage.[235]

Public procurement rules and practices can play a role in supporting collective bargaining.[236] Article 18(2) of the Public Procurement Directive 2014/24/EU provides that Member States shall take appropriate measures to ensure that in the performance of public contracts, employers acting as contractors for the public administration comply with applicable obligations in the fields of social and labour law established by national or EU social and labour rules, applicable collective agreements and/or international law. One way to achieve this is to introduce the requirement to comply with obligations set by collective agreements in tender documents. Such obligations must always be applied also in accordance with EU rules on posted workers. Complying with this provision therefore ensures that EU, national and international labour obligations are met in the execution of public contracts and that obligations stemming from collective agreements are applied as relevant. However, limited information is currently available regarding the application and enforcement of this provision.

A9.2. Insufficiently clear frameworks to set statutory minimum wages

In some Member States, a clear and stable framework ensures that minimum wages maintain their value. This is in particular the case in Member States, which use automatic indexation to update minimum wages.[237] At the same time, some flexibility may be needed to preserve the capacity of the systems to swiftly respond to changes in socio-economic conditions.[238] In addition, some Member States have explicit targets for the adequacy of minimum wages.

In many other Member States statutory minimum wage setting is not always based on clear and stable criteria (see Table A9.1). For example, in Lithuania, the minimum wage legislation only makes a general reference to the need for minimum wage setting to take into account "broad economic conditions" while in 10 Member States (e.g. in Germany, Ireland, Greece, Spain, Croatia, Hungary, Latvia, Poland, Portugal, and Slovakia), a list of variables or factors (including among others exchange rates, hours worked, tax burden, household expenditure) is defined. In all these cases, no indication is provided on the way in which these variables should be used or on their interaction. For

[235] Bellmann, L., Bossler, M., Gerner, H.-D., & Hübler, O. (2018): "Collective bargaining coverage, works councils and the new German minimum wage." *Economic and Industrial Democracy*.
[236] This point was also stressed by the European workers' organisations in their reply to the first stage consultation.
[237] These Member States are Belgium, France, Luxembourg, Malta, the Netherlands, and Slovenia.
[238] In Belgium and the Netherlands, automatic indexation is applied with flexibility under adverse economic circumstances.

example, while in many Member States there is a reference to the need for taking into account wage developments (e.g. in Germany, Czechia, Croatia, Ireland, Greece, Latvia, Malta, the Netherlands, Poland, and Slovakia), only in three Member States does legislation make a direct link with specific indicators (Germany, the Netherlands, Malta).

In two Member States (Bulgaria and Romania), no criteria have been established to guide minimum wage changes. In Bulgaria, increases in the minimum wage follow the government's medium-term budgetary projections, however, no explanations are provided on the underlying quantitative mechanism. Thus, there is no mechanism for regularly updating the minimum wage in line with a set of criteria (poverty line developments, inflation or general wage increases). In Romania, minimum wage updates are not based on a clear mechanism or a set of stable criteria. This has resulted in an alternation of minimum wage freezes in some years and substantial increases in others, negatively affecting the business environment. Over the last years (2014-2019), both countries have received Country-Specific Recommendations in the context of the European Semester, which called for more transparent minimum wage setting mechanisms based on objective criteria for determining annual minima (such as job creation and competitiveness), as well as guidelines for minimum wage updating.

Table A9.1: National mechanisms for setting statutory minimum wages:

Automatic Indexation	Broad Economic situation and/or Variables		Not specified in legislation	Targets on MW levels	
BE	CZ**	LT	BG	CZ*	LT*
FR	DE	HR	RO	EE*	PL
LU	IE	HU			
MT	EL	PL			
NL	ES	PT			
SI	LV	SK			

***Notes*: *** Not by law, but in practice (e.g. tripartite agreement); ** Partly not by law, but in practice.
Sources: Relevant national legislation; ILO Working Conditions Laws Database / Minimum wage fixing database.

Periods of unpredictable minimum wage developments have also been observed when the minimum wage is set to follow the broad economic conditions. For example, between 2000 and 2002, Hungary increased its statutory minimum wage by about 60% in real terms, in parallel with a GDP growth from 4.5% to 4.7%. As a percentage of the median wage, the minimum wage increased from 36% in 2000 to 57% in 2002. With the fall of the GDP to 4.1% in 2003, the minimum wage was frozen and smaller increases followed in subsequent years, resulting in a ratio to the median wage of 46% in 2005.

Together with the lack of appropriate criteria referring to adequacy and to general socio-economic conditions, in some Member States, governments are not bound to a certain frequency or regularity of updates (Table A9.2). In particular, in Bulgaria and

Romania, the regularity and timeliness of the updates are neither defined in legislation nor established through a regular practice. Actually, in recent years minimum wage increases occurred every year or twice a year but in a rather irregular manner. In Ireland, while in past years minimum wage updates varied both in regularity and timing, there seems to be a stabilisation of both elements, and now there is an annual update at the beginning of the year since 2016. Finally, in Germany, the Minimum Wage Commission takes a decision only every second year about updates of the minimum wage, which may have contributed to the erosion of the value of the minimum wage since its introduction in 2015.[239]

Table A9.2: Frequency of updates to the minimum wage

Frequency of updates					
Intra-annual	**Annual**			**Every 2 years**	**Not specified**
NL (Jan & July)	CZ*	HU	PT	BE*[2]	BG
	EE*	IE*	SI	DE	RO
	EL	LV	SK	LU[2]	
	ES	LT			
	FR[2]	MT			
	HR	PL[1]			

Notes: *Not by law, but in practice; 1: twice a year (Jan-July) if inflations exceeds 5%; 2: on top of indexation.
Sources: Relevant national legislation; ILO Working Conditions Laws Database / Minimum wage fixing database.

A9.3. Involvement of social partners in statutory minimum wage setting

Social partners often play only an advisory role in systems where the minimum wage setting is led by expert bodies. As described in section 2.5.3, in some Member States, an independent specialised body makes recommendations to the government on the annual minimum wage adjustment. In most of these cases, the involvement of the social partners is limited to an advisory or consultation role (Greece, Ireland). In Germany, social partners play a crucial role in minimum wage setting which has a strong bargaining component. This is due to the bilateral nature of the committee. The committee proposes updates to the level of the minimum wage, which the government can adopt or reject but from which it cannot deviate.

[239] In the June 2020 decision of the Minimum Wage Commission, it proposed a 10% increase in the minimum wage in four steps over the next 2 years. Prior to that, while the minimum wage was about 48% of the median and 43% of the average wage in 2015, by 2018 it had decreased to 46% of the median and 40% of the average wage. Germany is currently reviewing its minimum wage setting in view of the experience gained with the introduction of a statutory minimum wage. Cf. Country Report Germany 2020 (SWD(2020) 504 final), p 39-40; and OECD Statistics.

The role of social partners in the decision-making process is variable in Member States with automatic indexation. In all the Member States with automatic indexation (Belgium, France, Malta, Luxembourg, the Netherlands and Slovenia), it is also possible to make discretionary changes to the minimum wage on top of what is due to indexation. In four of these countries (Belgium, France, Malta and Slovenia), the law specifies a formal obligation to consult the social partners on such discretionary changes. In France, the law entitles social partners to present their recommendations to the government and these are published as an annex to the annual report of the Minimum Wage Expert Committee. In Luxembourg and the Netherlands, there is no legislative clause for social partner consultation. However, in both Member States, social partners provide non-binding views to the government on the minimum wage in practice.

Social partner consultation often lacks a structured tripartite or bipartite setting, thus it leads to non-binding recommendations. As described in Annex A6.2, in the majority of Member States, an institutionalised bipartite or tripartite consultation process is either defined by law or established in practice. However, in most of these cases (Bulgaria, Spain, Croatia, Hungary, Latvia, Malta, Portugal, Slovenia and Romania), the requirement to consult social partners does not specify the institutionalised setting but instead the approach is left to government. This process often leads to non-binding recommendations, with an unknown influence on the final decision-making. Only in a few Member States (Lithuania, Poland, and Slovakia) is a structured tripartite system in place[240], in which, if an agreement is reached through the consultation process, it becomes binding for all the parties. However, even in these cases, in practice over recent years, it was not possible to reach such an agreement; thus, the government has been setting the minimum wage unilaterally. To limit the government's discretion in such cases, a recent reform in Slovakia foresees that in the absence of a tripartite agreement, the amount of the monthly minimum wage for the next calendar year must be set at 60% of the average monthly nominal wage.

In some Member States, the involvement of social partners is insufficient or not institutionalised at all. Czechia is the only Member State where adjustments of the minimum wage are decided by the government without specific rules, as there is no institutionalised consultation process defined by law. In practice, social partners express views and non-binding recommendations through a tripartite committee; however, the government has the discretion to set the minimum wage unilaterally in any case.

In a number of Member States, there are challenges related to the involvement of social partners in the policy process in general. Such challenges have been identified in the framework of the European Semester, the annual cycle of economic policy coordination in the EU. In particular, in 2019, Hungary, Poland and Romania received

[240] A tripartite body consists of representatives of employers' organisations, trade unions and the government.

Country-Specific Recommendations calling for the need to strengthen social dialogue in general. In May 2020, the European Commission proposed recommendations to the same countries noting a deterioration of the situation of social dialogue in Hungary and Poland, in the context of measures taken during the Covid-19 pandemic.[241]

A9.4. Variations and exemptions

The coverage of minimum wages is affected by exemptions. In many Member States with a statutory national minimum wage, exemptions from the minimum wage legislation exist for specific groups of workers. In the majority of these cases, the justification for the exemption is related either to their up- or re-skilling or to their integration in the labour market. This is particularly relevant to the cases where the exemptions refer to (young) workers in education or training (Belgium, Czechia, Germany, Spain, and Ireland) and participants in active labour market policies (Belgium, Germany, and Croatia). There are also often exemptions for relatives employed in small family businesses (Belgium and Ireland) and people performing voluntary work (Germany and Spain). In other cases, specific groups of workers are not covered by the minimum wage law because separate laws or provisions cover the pay of those affected. Examples of such cases include people in the public service (Belgium, Czechia, Estonia, Spain, Lithuania, Latvia, and the Netherlands) and apprentices (Czechia, Germany and Ireland). In addition to these cases, a number of country-specific exemptions exist. These include workers employed for less than 1 month (e.g. seasonal labour in agriculture and horticulture) and peer-to-peer workers (e.g. people providing services to the local community or work for recognised digital platforms) and people with local employment contracts in Belgium; home-workers ("Heimarbeiter[242]") and people with disabilities in specific "employee-like relationships" (e.g. in dedicated workshops) in Germany; micro-employers (solo self-employed) in Croatia, sales representatives in France, people performing non-commercial activities and prison work in Ireland and people providing certain care services in Poland. Futhemore in Spain, regional exemptions are set for the autonomous cities of Ceuta and Melilla. For an overview of exemptions from statutory national minimum wages across Member States, see Table A9.3.

In many Member States with statutory minimum wages, reduced rates (so-called "variations") apply to specific groups of workers. In general, the possibility of hiring at rates below the standard minimum wage can be justified to prevent the loss of employment of those groups whose productive capacity is below that of the average minimum wage earner. For example, in many Member States (Belgium, Ireland, Luxembourg, Malta, and the Netherlands) there are purely age-based variations. In some other Member States (Belgium, Greece, Spain, France, and Portugal), variations can be

[241] Proposals published in the 'Spring package' of the European Semester on 20.05.2020, ULR: https://ec.europa.eu/commission/presscorner/detail/en/ip_20_901

[242] Workers carrying out paid work in the location they choose (e.g. home) which results in a product or a service specified by and owned by the employer.

observed that are either education-based and/or experience-based. These types of variations can be viewed either as a means for labour market integration or for (further) skill development. At the same time, some countries choose not to apply such age-based variations in order to ensure equal treatment and encourage the matching of pay with competency rather than age. For an overview of variations in statutory minimum wages across Member States, see Table A9.3.

In Member States where minimum wage protection is provided by collective agreements, reduced rates for specific groups can also be found in collective agreements. For instance, in Italy, collective agreements can stipulate rates below common minima for apprentices whereas interns and paid volunteers of the civil service (which may include non-profit organisations and public administration) are paid on the basis of a monthly allowance. In Denmark, Sweden and Finland, minimum rates are differentiated along several dimensions, usually by experience and occupation and, to a lesser extent, age and region. Differentiation by occupation often distinguishes between low- and higher-skilled jobs, but differentiation could also exist within these two categories. Variations in rates can also be found for apprentices and trainees. For example, in Sweden, many agreements differentiate minimum wages by at least one worker characteristic. In Finland, a differentiation of rates by region is found in the collective agreement for retail, with slightly higher rates in areas with higher costs of living.

A9.5. Lack of compliance with minimum wage provisions

Workers may not be protected by minimum wages due to compliance issues. In some Member States with statutory minimum wages, there is evidence that some workers, even though they are covered, receive in practice a remuneration below the minimum wage due to the non-respect of existing rules. For instance, labour inspections in Ireland found that 409 of the 4,747 employers (9%) inspected in 2017 were in breach of minimum wage legislation; in Slovakia, the 682 cases of non-compliance in the same year amounted to 5.4% of the 12,544 breaches of labour law.[243]

Compliance may also be an issue in some of the Member States exclusively where minimum wage protection is provided by collective agreements. For instance, it has been estimated that, in Italy, more than 10% of workers are paid below the wage floor

[243] For a more detailed survey of recent evidence on non-compliance see Eurofound (2019): "Minimum wages in 2019: Annual review". The other main source evidence is based on survey data. However, in surveys it is usually difficult to distinguish non-compliance from measurement errors and exemptions and variations based on the existing rules. Notably, measurement error in wages and working hours can stem from the inaccuracies of self-reporting, which many surveys are based on.

established by their reference collective agreement and that such underpayment implies an average shortfall of 20-23% of the reference minimum wage.[244]

In some cases, increasing minimum wage levels may lead to a higher risk of non-compliance, including undeclared work, although other types of interactions are also possible. The risk of undeclared work may be particularly significant in some sectors and occupations (e.g. domestic work).[245] However, minimum wage regulations may also interact with other forms of non-compliance, for instance tax evasion in the form of "envelope wages". This practice entails officially reporting the minimum wage while complementing pay with informal payments (envelope wages). While this may increase the net income of some workers, it reduces their future (e.g. pension) entitlements. There is evidence that, in a context of income underreporting for tax evasion purposes, envelope wages are reduced when minimum wages are increased.[246] Fighting tax evasion has been the stated aim of some minimum wage increases in the past,[247] even though the trade-off with the risks of outright undeclared work have also been recognised.[248] Moreover, the available information on the coverage of wages set in collective agreements is diverse and not complete in concerned Member States (see Annex A4.6).

[244] See: Garnero, A. (2018): "The dog that barks doesn't bite: Coverage and compliance of sectoral minimum wages in Italy", IZA Journal of Labor Policy, Vol. 7, No. 1.
[245] See, e.g. ILO (2016): Minimum wage policy Guide, especially p. 89. International Labour Organisation, Geneva.
[246] See, e.g., Tonin, Mirco (2011), "Minimum wage and tax evasion: Theory and evidence." *Journal of Public Economics*, vol. 95, no 11-12, p. 1635-1651.
[247] This is reported, for instance, by Harasztosi and Lindner (2019) related to Hungary, the country analysed by Tonin (2011, see previous footnote). See Harasztosi, P., and A. Lindner. 2019. "Who Pays for the Minimum Wage?" *American Economic Review*, 109 (8): 2693-2727.
[248] European Commission (2007): "Stepping up the fight against undeclared work", COM(2007)628, Brussels; and Williams, Colin C. (2010), "Tackling undeclared work in southeast Europe: lessons from a 2007 Eurobarometer survey", *Southeast European and Black Sea Studies*, 10:2, 123-145.

Table A9.3: Summary tables of exemptions from and variations in, statutory national minimum wages

MS	Exemptions		Variations	
BE	Education/ training related	Students in part-time learning schemes. Young people in dual training with a contract other than an employment contract.	Education/ experience based	Student contracts (variations by age): 94% for 20 years old; 88% for 19 years old; 82% for 18 years old; 76% for 17 years old; 70% for 16 years old and below.
	Labour Market related	Employment embedded in a re-employment programme (local employment contract for long-term unemployed and regional re-employment programs).	Young people	76 % for 17 years old; 70 % for 16 years old and below.
	Public Sector	Civil Servants (pay covered by royal decree).		
	Family business	Workers, under supervision of guardian, in family business where normally relatives work.		
	Other	Workers employed for less than 1 month (e.g. seasonal labour in agriculture and horticulture). Peer-to-peer work (services to the local community and work for recognized digital platforms, local employment contracts).	Other	Workers in flexi-jobs (in catering and accommodation and retail firms): paid an hourly rate below the MW (9.27 EUR vs 9,68 EUR).
BG	NA	NA	NA	NA
CZ	Education/ training related	Internships on a voluntary basis. Apprenticeships not based on a work contract.	NA	NA
	Public Sector	Civil servants whose pay is based on "tariff tables".		
DE	Education/ training related	Interns in specific types of internships: (1) mandatory internships as part of secondary or tertiary education, such as vocational training or higher education; (2) short-term internships (< 3 months); (3) introductory training for "orientation". Young people under 18 years of age without a vocational certificate. Apprentices (governed by separate law).	NA	NA
	Labour Market related	Young people (below 25 years old) participating in subsidized work-based training programmes. Previous long-term unemployed (12+months unemployed) during the first six months after getting back to work).		
	Voluntary work	Forms of work are understood as serving the common good. Quasi volunteers (mini jobs).		
	Other	Some "employee-like relationships" for people with disabilities (e.g. in dedicated workshops). Home-workers (e.g. tele-working).		
EE	Public Sector	Civil servants (pay not regulated by Employment Contracts Act).	NA	NA
IE	Education/ training related	People taking part in a statutory apprenticeship (except hairdressing apprentices).	Young people	76 % for 17 years old; 70 % for 16 year olds and below.
	Family business	Workers who are close relatives of the employer.		
	Other	Non-commercial activity or work by prisoners .		
EL	NA	NA	Education/ experience based	Apprentices: (1) vocational higher education : 80 % of the national craftsmen minimum wage; (2) post-secondary, non-tertiary programmes 75% of the national craftsmen minimum wage,(3) hotels and other firms in tourism: 60 % for the duration of the season.
			Seasonal and domestic workers	Live-in domestic workers can be legally paid below the minimum wage (on the grounds that they receive food and lodging from their employer).
			Other	Variations between employees (skilled workers) and craftsmen (unskilled workers).

MS	Exemptions		Variations	
ES	Education/ training related	Internships on "non-labour" contracts.	Education/ experience based	Apprentices: 75 % during the first year of the contract and 85 % for the second and the third year for apprenticeships where a CBA does not exist.
	Public Sector	Civil servants (public official are excluded from the statute of workers).	Seasonal and domestic workers	Temporary/seasonal workers (max. 120 days) and domestic workers: Daily/Hourly rates, respectively, set below the general MW level.
	Voluntary work	Work carried out in friendship, benevolence or good neighbourliness .	People with disabilities	Persons with disabilities working on "low performance contracts": minimum 75% of the MW.
	Other	Regional exemptions are set for the autonomous cities of Ceuta and Melilla Commercial or mercantile agents (governed by commercial law).		
FR	Other	Sales representatives: their working time cannot be controlled. Other provisions apply.	Education/ experience based	Experienced-based: if less than 6 months experience in a sector: 80% for 15 or 16 yrs old; 90% for 17 yrs old.
				Apprentices: (1) initial education (contract d'apprentissage), 25%-78% (depending on age and experience); (2) continuous training "contrat de professionalization" and less than 26 years old, 55%-85% (depending on age and experience).
			Other	Mayotte overseas department: specific (lower) MW rate applies (EUR 7.57 per hour vs EUR 10.03 in FR).
HR	Labour Market related	Participants in the ALMPs measure "Traineeship for work without employment (SOR)" (no employment contract).	Other	By way of derogation, a collective agreement may set a minimum wage below the one stipulated by the government decree. These wages cannot be below 95 % of the prescribed minimum wage.
	Other	Micro-employers (Solo self-employed, who are the sole employee).		
LV	Public Sector	Employees of State and local government authorities (covered by a separate law).	NA	NA
LT	Public Sector	Civil servants (remuneration is regulated by separate laws).	NA	NA
LU	NA	NA	Young people	70% for under 18 years old; 80% for 18 years old 90% for 19 years old.
HU	NA	NA	Other	Workers in the Public Works Scheme (59.1% of MW).
MT	NA	NA	Young people	95% for below 17 years old; 96% for 17 years old.
NL	Public Sector	Certain civil servants (military, police, judiciary).	Young people	30-40% for 15-17 years old; 50% for 18 years old; 60% for 19 years old; 80% for 20 years old.
PL	Other	People providing certain care services (foster / family home activities and family assistance home, home care services, during leisure activities or excursions).	NA	NA
PT	NA	NA	Education/ experience based	Apprentices, trainees or workers in training (length of variation depends on qualification): 80% for up to 1 year.
			People with disabilities	50 - 90 % depending on coefficient of capacity to work.
RO	NA	NA	NA	NA
SI	NA	NA	NA	NA
SK	NA	NA	NA	NA

Table A9.4: Summary tables deductions from statutory national minimum wages

MS	Deductions	
BE	Social security contributions; fines; compensation and interest within the performance of the contract; advance payments; guarantees and overpayments. By royal decree, the list of deductable expenses may be defined, which could include housing, utilities, land use, food, non-compulsory tools and work equipment (if not part of the remuneration in kind).	No specific provisions for MW
BG	Advance payments; overpayments due to technical errors; taxes and social security contributions; enforcement orders; products or services not meeting the quality requirements (if fault of the employee), damage compensation; training (max 10%).	No specific provisions for MW
CZ	If provided by law, by an agreement on deductions or in order to satisfy the employee's obligations; trade union membership fees (when agreed by collective agreement or by written agreement between the employer and the trade union, and the employee).	No specific provisions for MW
DE	Damage compensation; missed working hours; provision of food.	No specific provisions for MW
EE	In the case of disregard of clear and timely instructions of the employer regarding the work results (only immediately after acceptance of the unsatisfactory results); damage compensation; unjustified absence from work.	No deductions can be made if the salary does not exceed the minimum wage
IE	If provided for by law or court decision; if the employee gave his/her prior written consent; damage compensation; overpayments; for certain goods/services supplied to the employee.	No specific provisions for MW
EL	Damage compensation; if provided by law or court decision; in the case of a request of the employee (e.g. loan instalment payments to be paid directly to the bank).	No specific provisions for MW
ES	Deductions in Spain exist *(no additional information)*.	No specific provisions for MW
FR	compensation for serious damage and misconduct by the employee; unjustified absence or delay from work; participation in strike (in certain cases); acquisition of ticket-restaurants; excess income earned during sick leave; amounts unduly paid for maintaining the remuneration during "replacement compensatory rest period"; contributions paid on behalf of the employee following a URSSAF adjustment (social contributions).	The amount that can be deducted increases progressively with increased salary, and in the lowest tranche, a maximum of one twentieth of the salary can be deducted
HR	Damage compensation; participation in strike (with employee's consent but not before the occurance of the claim).	No specific provisions for MW
LV	Overpayment due to an error (incl. fault of the employee); advance payment for anticipated expenses that did not occur; payments for leave if the employee is dismissed before the end of the working year; compensation for losses caused by the employee (only with written consent of the employee); improper or poor quality work performance under certain conditions.	In any case of compensation for damages, the resulting salary cannot fall below the minimum wage plus the state social security benefit for each dependent minor child
LT	Return of funds transferred to the employee and not used for their intended purpose; overpayment due to calculation errors; damage compensation; excess (holiday) pay for leave (upon termination of the employment contract either by the employee without a valid reason or the employer due to the fault of the employee).	Deductions of up to 20% from minimum wages can be made for the compensation of damages (in some cases up to 50%)

MS	Deductions	
LU	Fines (by law or by the internal regulations of the business); damage compensation (incl. damages to or loss of tools, instruments, goods or materials and maintenance products); advance payments (cannot exceed 10 % of the net monthly salary in all cases).	No specific provisions for MW
HU	Damage compensation; advance payment; with the consent of the employee.	No specific provisions for MW
MT	Unjustified absence from work (less hours worked); certain fines; if ordered by the court or provided in collective agreement.	No specific provisions for MW
NL	Damage compensation; fines; overpayments; for property, machines and tools rented out to the employee; if provided by law.	No deductions can be made if the paid salary does not exceed the minimum wage (except deductions of advance payments)
PL	Enforcement orders (to satisfy benefits maintenance, to cover claims other than maintenance); advance payment; fines for non-compliance with organisational or health and safety rules.	75% of the MW is free from deductions (90% after deducting penalties)
PT	Social security contributions; if ordered by law or court decision; compensation payable to the employer; fines (may not exceed one third of the daily remuneration); capital amortisation or loan interest payment granted by the employer; price of meals at the workplace, the use of a telephone, supply of food, fuel, or materials (when requested by the worker); other expenditure incurred on behalf of the worker; advance payment.	No specific provisions for MW
RO	Damage compensation (if established by judicial decision); maintenance obligations according to the Family Code; contributions and taxes due to the State; damage caused to public property as a result of tort or delict; coverage of other liabilities and disciplinary sanctions (reduction of base salary over a duration of 1-3 months by 5-10 %; accumulated salary deductions may not exceed half of the net salary each month).	No specific provisions for MW
SI	Only if provided by law (employment contracts which contain other arrangements are be invalid). Deductions are appropriate in view of the employee's efforts to repair damages, to his/her attitude to work or to his/her material condition.	No specific provisions for MW
SK	Advance payments; enforcement orders by a court or administrative authority; fines; compensation imposed by the competent authorities; wrongly received amounts of social insurance benefits and old-age savings pensions; state social benefits; benefits in material need; cash allowances to compensate for the social consequences of severe disability if the employee is obliged to repay them; uncleared advances on travel refunds; income compensation for the employee's temporary incapacity for work (to which the employee has lost entitlement or is not entitled); allowance in lieu of leave (to which the employee has lost entitlement or is not entitled); severance allowance which the employee is obliged to repay.	No specific provisions for MW

Table A9.5: Summary table of internal drivers per Member State

(a) Member States where minimum wage protection is provided by collective agreements

MS	Collective Bargaining		Update mechanism			Frequency of updates	SP Involvement		Variations	Deductions	Enforcement
	Coverage rate (%)	Observation	Current situation		Observations	Current situation	Current situation	Observations	Current situation	Current situation	Observations
Member States relying on collective bargaining to set minimum wages											
AT	98										Lack of data on the implementation of the social clause in public procurement
CY	44	Very low coverage of workers collective bargaining									Lack of data on the implementation of the social clause in public procurement
DK	76										Lack of data on the implementation of the social clause in public procurement
FI	91										Lack of data on the implementation of the social clause in public procurement
IT	80										Lack of data on the implementation of the social clause in public procurement
SE	89										Lack of data on the implementation of the social clause in public procurement

(b) Member States with Statutory minimum wages

MS	Collective Bargaining		Update mechanism			Frequency of updates	SP Involvement		Variations	Deductions	Enforcement
	Coverage rate (%)	Observation	Current situation		Observations	Current situation	Current situation	Observations	Current situation	Current situation	Observations
Member States with statutory minimum wages											
BE	93		Automatic indexation (prices), by law	Automatic indexation: if pivot index + 2 % over last base level, Δ MW based on the health index Discretional change based on labour costs (wage norm)		Automatic indexation: continuous through the year Discretional changes: bi-annual	Automatic indexation	Discretional changes: formal obligation to consult social partners which lead to binding bipartite decision. Consultations in a bipartite body.	Student contracts (variations by age for under 20 yrs old); Young people (variation by age for 16 and 17 yrs old); Workers in flexi-jobs	YES	Lack of data on the implementation of the social clause in public procurement
BG	23	Very low coverage of workers collective bargaining	No criteria specified by law	In practice: based on a fixed target level from Mid-Term Budget Forecast by the Ministry of Finance	No criteria specified by law	Not specified	Institutionalised bilateral/tripartite consultation process defined by law	Non-binding consultation, Gov can set MW unilaterally. Consultations in a tripartite body	NA	YES	Lack of data on the implementation of the social clause in public procurement
CZ	30	Very low coverage of workers collective bargaining	List of criteria defined by law. Adequacy target used in practice	Criteria: wages and consumer price developments by law plus labour market developments in practice Target: MW = 40% of average wages	Adequacy target set too low - risk that they do not provide for sufficient adequacy	Annual, in practice	Non-institutionalised system of consultations	In practice, tripartite non-binding consultation process. Consultations in a tripartite body	NA	YES	Lack of data on the implementation of the social clause in public procurement
DE	55	Relatively low coverage of workers collective bargaining	Criteria defined by law	Wages and incomes (collective agreements), broad economic situation (competition, employment)	The MW legislations make only a broad reference to economic conditions	Bi-annual, by law	Institutionalised: opinion of expert committee	Minimum wage specialised body makes binding recommendations. Social partners are members of the body	NA	YES	Lack of data on the implementation of the social clause in public procurement
EE	19	Very low coverage of workers collective bargaining	No criteria defined by law but used in practice. Adequacy target used in practice	Criteria: Δ MW = 2* Δ labour productivity Targets: lower limit: 40% of the projected national average wage; upper limit: 2* projected Δ real GDP growth	No criteria defined by law Adequacy target set too low - risk that they do not provide for sufficient adequacy	Annual, in practice	Institutionalised : bipartite	Binding bipartite decision. Consultations in a bipartite body	NA	YES	Lack of data on the implementation of the social clause in public procurement

MS	Collective Bargaining		Update mechanism			Frequency of updates	SP Involvement		Variations	Deductions	Enforcement
	Coverage rate (%)	Observation	Current situation		Observations	Current situation	Current situation	Observations	Current situation	Current situation	Observations
IE	34	Very low coverage of workers collective bargaining	List of criteria defined by law	Broad economic situation (e.g. employment, competitiveness), prices (cost of living), wages and incomes (changes in earnings)	The MW legislations make only a broad reference to economic conditions	Annual, in practice	Institutionalised: following expert committee	Minimum wage specialised body makes non-binding recommendations. Social partners are not members of the body	Young people (variation by age for 16 and 17 yrs old)	YES	Lack of data on the implementation of the social clause in public procurement
EL	25	Very low coverage of workers collective bargaining	List of criteria defined by law	Broad economic situation (e.g. employment, competitiveness), prices, wages and incomes	The MW legislations make only a broad reference to economic conditions	Annual, by law	Institutionalised: following expert committee	Minimum wage specialised body makes non-binding recommendations. Social partners are not members of the body but provide views.	Apprentices; Live-in domestic workers	YES	Lack of data on the implementation of the social clause in public procurement
ES	68	Relatively low coverage of workers collective bargaining	List of criteria defined by law	Broad economic situation (e.g. productivity), prices (CPI), wages and incomes (e.g. labour share)	The MW legislations make only a broad reference to economic conditions	Annual, by law	Institutionalised bilateral/tripartite consultation process defined by law	Non-binding consultation, Gov can set MW unilaterally . No consultation body.	Apprentices; Temporary/seasonal workers (max. 120 days); Persons with disabilities working on "low performance contracts"	YES	Lack of data on the implementation of the social clause in public procurement
FR	94		Automatic indexation (prices and wages), by law	Automatic indexation: if CPI growth >2% since last MW update, Δ MW = 1/2 of Δ average hourly wage in pp Discretional change based on expert opinion and social partners agreement		Annual, by law (automatic indexation + discretional change)	Automatic indexation	Discretional changes: opinion of expert committee and law entitles SP to provide non-binding recommendations. Social partners are not members of the body but provide views.	Young people (16 and 17 yrs old) with less than 6 months of experience; Some types of Apprentices; Mayotte overseas department	YES	Lack of data on the implementation of the social clause in public procurement
HR	45	Very low coverage of workers collective bargaining	List of criteria defined by law	Broad economic conditions (e.g. unemployment and employment), prices (inflation), wages and incomes	The MW legislations make only a broad reference to economic conditions	Annual, by law	Institutionalised bilateral/tripartite consultation process defined by law	Non-binding consultation, Gov can set MW unilaterally. No consultation body.	By way of derogation, a collective agreement may set a minimum wage below the one stipulated by the government decree	YES	Lack of data on the implementation of the social clause in public procurement
LV	24	Very low coverage of workers collective bargaining	List of criteria defined by law	Broad economic and labour market situation (e.g. labour productivity, unemployment), prices (e.g. labour costs), wages and incomes (e.g. labour income)	The MW legislations make only a broad reference to economic conditions	Annual, by law	Institutionalised bilateral/tripartite consultation process defined by law	Non-binding consultation, Gov can set MW unilaterally. Consultations in a tripartite body.	NA	YES	Lack of data on the implementation of the social clause in public procurement

MS	Collective Bargaining		Update mechanism			Frequency of updates	SP Involvement		Variations	Deductions	Enforcement
	Coverage rate (%)	Observation	Current situation		Observations	Current situation	Current situation	Observations	Current situation	Current situation	Observations
LT	8	Very low coverage of workers collective bargaining	List of criteria defined by law Adequacy target used in practice	Criteria: Broad economic situation Target: average to minimum wage at 45-50%	The MW legislations make only a broad reference to economic conditions Adequacy target set too low - risk that they do not provide for sufficient adequacy	Annual, by law	Institutionalised: tripartite	Binding tripartite decision if agreement reached, otherwise Gov can set MW unilaterally. Consultations in a tripartite body	NA	YES	Lack of data on the implementation of the social clause in public procurement
LU	59	Relatively low coverage of workers collective bargaining	Automatic indexation (prices), by practice	Automatic indexation: if CPI + or -2.5% over last 6m Discretional change based on economic conditions and wage developments		In practice: Automatic indexation every 6m Discretional changes: bi-annual, by law	Automatic indexation	Automatic indexation. No obligation to consult social partners. No consultation body	Young people (variation by age for 17, 18 and 19 yrs old)	YES	Lack of data on the implementation of the social clause in public procurement
HU	20	Very low coverage of workers collective bargaining	List of criteria defined by law	Broad economic and labour market situation	The MW legislations make only a broad reference to economic conditions	Annual, by law	Institutionalised bilateral/tripartite consultation process defined by law	Non-binding consultation, Gov can set MW unilaterally. Consulations in a advisory body. Social partners are members of the body.	Workers in the Public Works Scheme	YES	Lack of data on the implementation of the social clause in public procurement
MT	50	Relatively low coverage of workers collective bargaining	Automatic indexation (prices) plus discretional changes, by law	Automatic indexation: Cost of Living Allowance (retail price index) Discretional change: broad economic situation (e.g. productivity), prices (labour costs), wages and incomes (e.g. collective agreements)		Annual, by law	Automatic indexation	Discretional changes: formal obligation to consult social partners which leads to non-binding recommendations. Consultations in a tripartite body.	Young people (variation by age for below 17 and 17 yrs old)	YES	Lack of data on the implementation of the social clause in public procurement
NL	79		Automatic indexation (wages) plus discretional changes, by law	Automatic indexation: 50% of wage growth (collectively bargained) + Δ predicted wage growth Discretional change: broad economic situation (employment, social security costs)		Twice per year (Jan & July)	Automatic indexation	Automatic indexation. No obligation to consult social partners. No consultation body	Young people (variation by age for below 15-20 yrs old) resulting in very low youth minimum wages affecting many young workers	YES	Lack of data on the implementation of the social clause in public procurement

MS	Collective Bargaining		Update mechanism			Frequency of updates	SP Involvement		Variations	Deductions	Enforcement
	Coverage rate (%)	Observation	Current situation		Observations	Current situation	Current situation	Observations	Current situation	Current situation	Observations
PL	17	Very low coverage of workers collective bargaining	List of criteria defined by law	Broad economic and labour market situation (e.g. labour productivity), prices, wages and incomes Target: average to minimum wage at 50%	The MW legislations make only a broad reference to economic conditions Adequacy target set too low - risk that they do not provide for sufficient adequacy	Annual (if inflation below 5%) or twice a year (Jan & July), by law	Institutionalised: tripartite	Binding tripartite decision if agreement reached, otherwise Gov can set MW unilaterally. Consultations in a tripartite body.	NA	YES	Lack of data on the implementation of the social clause in public procurement
PT	74		List of criteria defined by law	Broad economic situation (productivity), prices (cost of living), wages and incomes (income and price policy)	The MW legislations make only a broad reference to economic conditions	Annual, by law	Institutionalised bilateral/tripartite consultation process defined by law	Non-binding consultation, Gov can set MW unilaterally. Consultations in a tripartite body.	Apprentices, trainees or workers in training (length of variation depends on qualification)	YES	Lack of data on the implementation of the social clause in public procurement
RO	23	Very low coverage of workers collective bargaining	No criteria specified by law	Not specified	No criteria specified by law	Not specified	Institutionalised bilateral/tripartite consultation process defined by law	Non-binding consultation, Gov can set MW unilaterally. Consultations in a tripartite body	NA	YES	Lack of data on the implementation of the social clause in public procurement
SI	71		Automatic indexation (prices) plus discretional changes, by law	Automatic indexation: to costs of living (min +20 % / max +40%) + taxes and social security Discretional change: Broad economic and labour market situation (e.g. economic growth, employment), prices, wages and incomes		Annual, by law (automatic indexation + discretional change)	Automatic indexation	Discretional changes: formal obligation to consult social partners which leads to non-binding recommendations. No consultation body	NA	YES	Lack of data on the implementation of the social clause in public procurement
SK	30	Very low coverage of workers collective bargaining	List of criteria defined by law	Broad economic and labour market situation (e.g. employment), prices, wages and incomes	The MW legislations make only a broad reference to economic conditions	Annual, by law	Institutionalised: tripartite	Binding tripartite decision if agreement reached, otherwise Gov can set MW unilaterally. Consultations in a tripartite body	NA	YES	Lack of data on the implementation of the social clause in public procurement

Annex 10 Recent reforms in Member States: An overview

Over the last decade, many Member States have implemented reforms in their minimum wage setting systems. These reforms included introductions of new minimum wage legislations, reforms in the minimum wage setting systems and amendments related to variations in minimum wage levels.

Introduction of new minimum wage legislation:

- **Germany** introduced a statutory minimum wage law in 2015. The new law which entered into force on 1 January 2015, which was based on the Minimum Wage Law of 2014 ("*MiLoG"*) established a Minimum Wage Commission (MWC), which assigned seats to social partners and recommends minimum wage updates to the government. Furthermore, legislation designs an updating mechanism, including the frequency, a timeline and a quantitative mechanism.

- **Greece** introduced a new statutory minimum wage law in 2012, which specified, among others, a non-binding, multi-stage consultation process that involves social partners and expert bodies and variations in the minimum wage level for young workers (<25 years), which were later abolished (see below). It is worth noting that this mechanism was first implemented in 2019 after the end of the financial assistance programme.

- **Cyprus** introduced statutory minimum wages on 1 January 2020 for certain professions in the hotel industry (13 professions), to be applied by the sector's employers, independently of their adherence to the collective agreement.

- **Romania** introduced in 2018 a statutory gross minimum wage for the construction sector.

Reforms of existing minimum wage setting systems:

- In **Slovakia**, a new reform to the minimum wage legislation (Act No. 663/2007) was introduced in 2020. The reform obliges the government, when updating minimum wages, to adopt the social partners' bargaining outcomes, in case they reach an agreement, or otherwise, to apply automatic indexation of minimum wages to the average nominal wages (namely 60% of the average nominal gross wage in the economy from the previous year). The new mechanism will be applied for the first time for setting the minimum wage in 2021.

- In **Croatia**, a new Minimum Wage law (Act 2018/118) was established in 2018 which set an annual frequency for minimum wage updates, defined a decision-making deadline and specified that variables on the broad economic situation (e.g. prices, wages and incomes) should be taken into account when updating the minimum wage. Additionally, following a ministerial decision in 2019, an expert Commission ("*Povjerenstva*") was set up which is responsible for, inter alia, providing non-binding recommendations on future minimum wage updates.

- In **Slovenia**, a new reform to the Minimum Wage Act was introduced in 2018, which formalised the existing automatic indexation mechanism (a formula was agreed for the update) and set respective upper and lower limits, effective as from 2021. Additionally, from 2020 onwards, minimum wage workers are entitled to a seniority bonus on top of their salary as all other workers are.

- In **Latvia**, a new reform to the minimum wage legislation was introduced in 2016 (Regulation 563/2016) which laid down new procedures for setting the minimum wage, including the updating mechanism to be used and the consultation process with social partners.

- In **Ireland,** a reform of the minimum wage law was introduced in 2015 (National Minimum Wage Act 2015), which established a Low Pay Commission responsible for providing annual, non-binding recommendations to the government on minimum wage updates.

- In **Bulgaria**, the ILO Minimum Wage Fixing Convention No. 131 (1970) was ratified by a special law adopted on 24 January 2018, supplementing its regulatory framework for setting the minimum wage on clearly structured and pre-defined criteria (socio-economic indicators). On 20 March 2018, the ratification was deposited with the ILO. According to Art. 8, paragraph 3, the Convention entered into force for Bulgaria on 20 March 2019, 12 months after the date of ratification. The Bulgarian Government, represented by the Ministry of Labour and Social Policy, together with the social partners, continues discussions on the development of a transparent mechanism for setting the minimum wage.

- In **Estonia**, according to the national minimum wage agreement that was concluded between the Estonian Trade Union Confederation (EAKL) and the Estonian Employers Confederation (ETKL) on 26 October 2017, an increase in the minimum wage would be calculated annually on the basis of labour productivity and economic growth until 2022. It was also agreed that in 2021, the national minimum wage will be 40% of average wage, and that by the summer of 2021 an impact study about the minimum wage will be carried out, to serve as a

basis for agreeing on a formula to calculate the minimum wage level for the coming years.

- In **Lithuania**, in 2012, Article 187 of the Labour Code was amended to change the procedure of the determination of the legal minimum wage, allowing the Parliament to determine the minimum wage if the government and the social partners in the Tripartite Council fail to find an agreement before 1 June of each year.

- **France** created in 2009 a Minimum Wage Commission formed by independent experts that provides support and recommendations on the evolution of the minimum wage. Moreover, since 2013 the indexation mechanism to calculate the SMIC includes clerks' wages as a reference.[249]

- In **Portugal**, after a three-year freeze during the bailout programme, from 2014, the minimum wage is determined annually following consultation with the social partners (Article 273, N. 1 of the Portuguese Labour Code). Additionally, in 2017, the government established a Commission to assess the development of the minimum wage through quarterly reports which are published and discussed with social partners.

Reforms related to the coverage of minimum wages:

In many Member States, reforms were implemented over the years related to variations in the minimum wage level for specific groups of people. For example:

- **Greece** and **Ireland** abolished variations for young people in 2019 and 2018 respectively.

- **Belgium** abolished all variations in minimum wage for young people aged 18-20 years in 2015.

- **Czechia** eliminated variations in statutory minimum wage levels for young people and people with disabilities in 2013. Since January 2013, the statutory minimum wage is thus the same irrespective of the worker age or job type. In 2019, authorities passed legislation to facilitate the employment of non-EU nationals, in particular for skilled and qualified workers. The measure raised the quotas for a number of workers from selected countries and set minimum wages for foreign workers above the national minimum wage.

[249] The SMIC rate is calculated based on inflation, when it rises for at least 2 per cent, SMIC rises on the same amount, and growth as SMIC is raised annually by at least half of the increase in the purchasing power of blue-collar and clerks average hourly wage. Until 2013, the growth component considered only blue-collar workers' wages. (Gautié and Laroche, 2018)

- **Germany** established a minimum wage for temporary workers in 2016, following a collective agreement that was declared generally binding. This was in force until December 2019. New minimum wages have been agreed for the construction sector, the roofing trade and the cleaning of buildings. The new minimum wages are based on collective agreements concluded at the end of 2017 and are in force from March 2018 until the end of 2019 or 2020. The minimum wage also applies to employees posted to Germany from abroad. Moreover, collective bargaining distinguished between the minimum wage and the qualification level. Germany has, as of 1 January 2020, a newly introduced statutory minimum wage for apprentices and professional experience.

- The **Netherlands** increased the minimum wage for young workers in 2017. In 2018, the Minimum Wage Act was modified so that overtime needs to be paid (as part of the employee's salary) instead of being compensated by extra leave (holiday hours). The Minimum Wage Act now stipulates that an employee needs to receive the hourly minimum wage for all hours worked within a normal payment period (four weeks or a month). Overtime and extra hours cannot be compensated for by free time to be taken at a later date.

- In **Romania** in 2018, the Labour Code was amended so that the level of the statutory minimum wage is differentiated for workers with higher education and work experience. In 2020, coefficients for educational attainment were set to differentiate for all levels of education, from unqualified workers to those with a PhD.

- **Luxembourg:**

    - increased the minimum wage for qualified or skilled workers aged 18+ as of January 2020.

    - since 2019, entitles the government to issue acts for "structural adaptation" of the minimum wage in addition to the biannual reviews.

- **Slovakia** increased wage supplements for night shifts, holidays, and hazardous jobs in 2018.

- **Poland** extended the coverage of the minimum wage to the whole health sector in 2018. The amendment also modifies and clarifies the way for calculating a gradual pay rise for all the employees covered by the law. In 2019, the "seniority allowance" was added to the list of components excluded in the calculation of the minimum wage (also, jubilee award, severance pay due to retirement or acquiring the right to invalidity benefits, bonus for overtime work and bonus for night work). The purpose of the modification is to eliminate the unfavourable treatment

that workers with a long employment record suffer under the former circumstances.

- In **Malta**, the government, the opposition and social partners exceptionally agreed on increasing the minimum wage for low earners who have been employed for more than one year (or two years with the same employer). The agreement also included temporary supplements to indexation increases for 2018 and 2019 (National Minimum Wage National Standard Order – Subsidiary Legislation 452.17). This decision was taken in 2017 amid pressure from NGOs claiming the minimum wage was below subsistence level.

Annex 11 Policy options: Additional information

A11.1. Options related to collective bargaining

Regulatory framework and enabling conditions for collective bargaining

Setting up a regulatory framework or enabling conditions implies taking measures in view of strengthening collective bargaining. Such measures, implemented at a national level, could include:

- **Mediation, arbitration and peace clauses in collective agreements**. The compliance and enforcement of collective agreements is crucial for their effectiveness. Enforcement needs to be ensured so that decisions taken at the highest level are also applied at the lowest one. In this respect, peace clauses are provisions in collective agreements forbidding signatory unions to strike on issues regulated by the agreement. Similarly, mediation and arbitration can help find an agreement within the framework of collective bargaining, thereby smoothing negotiations and improving the governability of the system.[250] Mediation uses the expertise of a neutral third party to assist negotiations and foster agreement among the social partners, while arbitration goes further by allowing the third party to end the conflict based on his assessment. Mediation bodies are considered as a prerequisite for decentralised wage formation in a highly organised economy with powerful unions.[251]

- **Establish representativeness criteria for social partner organisations.** Representativeness criteria are mainly aimed at increasing the effectiveness and legitimacy of extensions. The representativeness of social partners provides them legitimacy for collective bargaining.[252]

- **Duration of collective agreements.** An important characteristic of collective agreements is their duration. Duration can be set by social partners (the most common practice) or by law. Furthermore, duration can be different for different elements of the same agreement (both for wage and non-wage components). A long or even indefinite duration of collective agreements favours workers as it keeps them covered, ensuring stability and social peace.[253] It is however possible that indefinite duration reduces the incentives to renegotiate an agreement, thus

[250] OECD, "Collective bargaining in a changing world of work", Employment outlook 2017, 2017.
[251] Visser J., "What happened to collective bargaining during the great recession?", IZA Journal of Labor Policy, 2016.
[252] Eurofound, "The concept of representativeness at national, international and European level", 2016.
[253] Hijzen A., Martins P and Parlevliet J., "Collective bargaining through the magnifying glass: A comparison between the Netherlands and Portugal", DNB working paper, November 2017.

making it difficult to adjust the conditions to changing labour market needs and socio-economic developments.

- **Length of validity of a collective agreement (retroactivity, ultra-activity).** The length of validity is also defined by its validity before its signature (retroactivity) and beyond its expiry date (ultra-activity). The retroactivity of agreements seeks to ensure that a level playing field is preserved. Retroactivity clauses mainly matter for wages, as they usually oblige firms to pay wage arrears.[254] Ultra-activity of agreements is intended to protect workers preserving the continuity of wage and non-wage conditions should employers refuse to negotiate a renewal (ibid.). They strengthen workers' bargaining power and may contribute to increasing stability and social peace. However, retroactivity clauses may prove harmful for employment during a period of liquidity constraints for firms, as they may need additional liquidity to pay wage arrears. Ultra-activity clauses could reduce the responsiveness of the labour market to unexpected shocks as they may reduce the incentives for one of the signing parties to renegotiate agreements and, therefore, may become an obstacle to wage adjustment.[253]

A11.2. Options related to adequacy indicators

Table A11.1: Possible adequacy indicators and respective indicative reference values

Indicators	Indicative reference values
Gross median wage	50%, 55%, 60%
Gross average wage	40%, 45%, 50%
Net median wage (i.e. net income of a single worker earning the gross median wage)	60% or 70%
Net average wage (i.e. net income of a single worker earning the gross average wage)	50% or 60%
Median net household income, adjusted for household composition ("equivalised")	60% (***Note:*** This reference value is equal to the so-called "at-risk-of-poverty threshold". This means that, if the net income of a single minimum wage earner is above this reference value, then he or she is not at risk of poverty.)

[254] Hijzen A. and Martins P., "No Extension without Representation? Evidence from a Natural Experiment in Collective Bargaining", IMF Working Paper WP/16/143, July 2016

A11.3. Composition of policy packages: Overview

	Package/ Dimension	Baseline	Package A	Package B	Package C
Member States where minimum wage protection is provided by collective agreements	**Strengthening collective bargaining in wage setting**		**Measure 1.1**: Capacity building for social partners and encouraging negotiations on wages. **Measure 1.2**: Administrative extensions of collective agreements, when agreed with social partners.	**Measure 1.1**: Capacity building for social partners and encouraging negotiations on wages. **Measure 1.3**: Member States with collective bargaining coverage below 70% to provide for a regulatory framework or enabling conditions, as well as an action plan to promote collective bargaining.	**Measure 1.1**: Capacity building for social partners and encouraging negotiations on wages. **Measure 1.3**: Member States with collective bargaining coverage below 70% to provide for a regulatory framework or enabling conditions, as well as an action plan to promote collective bargaining.
	Enforcement and monitoring		**Measure 5.1**: Strengthen enforcement of wage clauses in collective agreements. **Measure 5.2**: Ensuring compliance in public procurement with collectively agreed wages. **Measure 5.3:** Enhancing monitoring and data collection mechanism on wages set in collective agreements.	**Measure 5.1**: Strengthen enforcement of wage clauses in collective agreements. **Measure 5.2**: Ensuring compliance in public procurement with collectively agreed wages. **Measure 5.3:** Enhancing monitoring and data collection mechanism on wages set in collective agreements.	**Measure 5.1**: Strengthen enforcement of wage clauses in collective agreements. **Measure 5.2**: Ensuring compliance in public procurement with collectively agreed wages. **Measure 5.3:** Enhancing monitoring and data collection mechanism on wages set in collective agreements.

	Package/ Dimension	Baseline	Package A	Package B	Package C
Member States with statutory minimum wages	**Strengthening collective bargaining in wage setting**		**Measure 1.1**: Capacity building for social partners and encouraging negotiations on wages. **Measure 1.2**: Administrative extensions of collective agreements, when agreed with social partners.	**Measure 1.1**: Capacity building for social partners and encouraging negotiations on wages. **Measure 1.3**: Member States with collective bargaining coverage below 70% to provide for a regulatory framework or enabling conditions, as well as an action plan to promote collective bargaining	**Measure 1.1**: Capacity building for social partners and encouraging negotiations on wages. **Measure 1.3**: Member States with collective bargaining coverage below 70% to provide for a regulatory framework or enabling conditions, as well as an action plan to promote collective bargaining
	National frameworks for statutory minimum wage setting and updating		**Measure 2.4**: Benchmark the minimum wage level against a measure of decent living standards, defined at the national level.	**Measure 2.1**: Clear and stable criteria to guide minimum wage setting and its regular updating, defined in national legislation, and consultative bodies to advise authorities established. **Measure 2.3**: Indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.	**Measure 2.2**: Automatic indexation to update statutory minimum wages at least annually, based on a formula defined at the national level. **Measure 2.3**: : Indicators and reference values to guide the assessment of the adequacy of statutory minimum wages

Member States with statutory minimum wages	**Involvement of social partners in setting statutory minimum wages**		**Measure 3.2**: Setting up a bipartite or tripartite body with decision-making power.	**Measure 3.1**: Ensuring the timely and effective involvement of social partners in minimum wage setting and updating.	**Measure 3.1**: Ensuring the timely and effective involvement of social partners in minimum wage setting and updating.
	Variations, deductions and exemptions from statutory minimum wages		**Measure 4.2** Banning variations, deductions and exemptions from statutory minimum wages.	**Measure 4.1**: Limited and justified use of variations in and deductions from statutory minimum wages, decided by Member States in consultation with social partners.	**Measure 4.1**: Limited and justified use of variations in and deductions from statutory minimum wages, decided by Member States in consultation with social partners.
	Enforcement and monitoring		**Measure 5.1**: Strengthening the enforcement of statutory minimum wages and wage clauses in collective agreements. **Measure 5.2**: Ensuring compliance in public procurement with wages set by collective agreements and with statutory minimum wages. **Measure 5.3**: Enhancing monitoring and data collection mechanism on statutory minimum wages and of wages set in collective agreements.	**Measure 5.1**: Strengthening the enforcement of statutory minimum wages and wage clauses in collective agreements. **Measure 5.2**: Ensuring compliance in public procurement with wages set by collective agreements and with statutory minimum wages. **Measure 5.3**: Enhancing monitoring and data collection mechanism on statutory minimum wages and of wages set in collective agreements.	**Measure 5.1**: Strengthening the enforcement of statutory minimum wages and wage clauses in collective agreements. **Measure 5.2**: Ensuring compliance in public procurement with wages set by collective agreements and with statutory minimum wages. **Measure 5.3**: Enhancing monitoring and data collection mechanism on statutory minimum wages and of wages set in collective agreements.

Annex 12 Impacts of policy measures and policy packages: Additional information

A12.1. Statutory minimum wages, wages, and the share of workers affected

To estimate the magnitude of increasing minimum wage levels on social and economic outcomes, a microsimulation exercise has been conducted using the Euromod model.[255] The hypothetical scenarios simulated correspond to situations in which Member States with statutory minimum wages below a certain threshold raise it to this level. These hypothetical scenarios are defined in terms of ratios to the median and average wages. This section reports impacts on statutory minimum wages in Member States that have them, the share of workers earning the minimum wage, and the increases in the wages of affected workers as well as aggregate wages.

Impact on statutory minimum wages

Minimum wage increases, in percentages, implied by various indicative reference values are shown in Graph A12.1 and Table A12.1 presents the implied increases in nominal terms. The highest reference values are close to the highest statutory minimum wages currently observed in the EU. According to Eurostat estimations for 2019, only Portugal has a statutory minimum wage above 60% of the median and 50% of the average wage. Bulgaria, France and Slovenia are at or close to 60% of the median, while countries approximating 50% of the average wage are France, Slovenia and Spain.[256]

In contrast, the lower reference values would imply a gap to be closed for about one-quarter to one-third of Member States. A reference value of 50% of the median wage would imply increases for 9 Member States from their 2019 levels (Czechia, Croatia, Estonia, Germany, Greece, Ireland, Latvia, Malta, the Netherlands; the implied increase would be small in Croatia, Greece and the Netherlands). Meanwhile, a reference value of 40% of the average wage would imply increases for 6 Member States: Czechia, Estonia, Hungary, Ireland, Latvia and Malta.

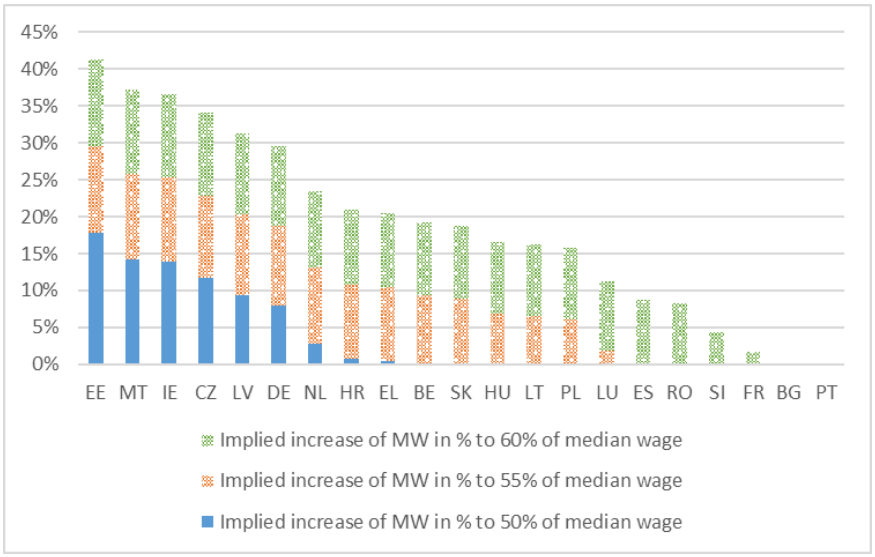
Intermediate reference values would imply gaps to close for one-half to two-thirds of the Member States. In particular, an intermediate reference value of 55% of the median wage would imply increases for 15 Member States. These are, in addition to the ones below 50% in 2019: Belgium, Slovakia, Hungary, Lithuania, Luxembourg and

[255] For a description of the methodology, see Annex A4.3.
[256] See also **Error! Reference source not found.** on page 5.

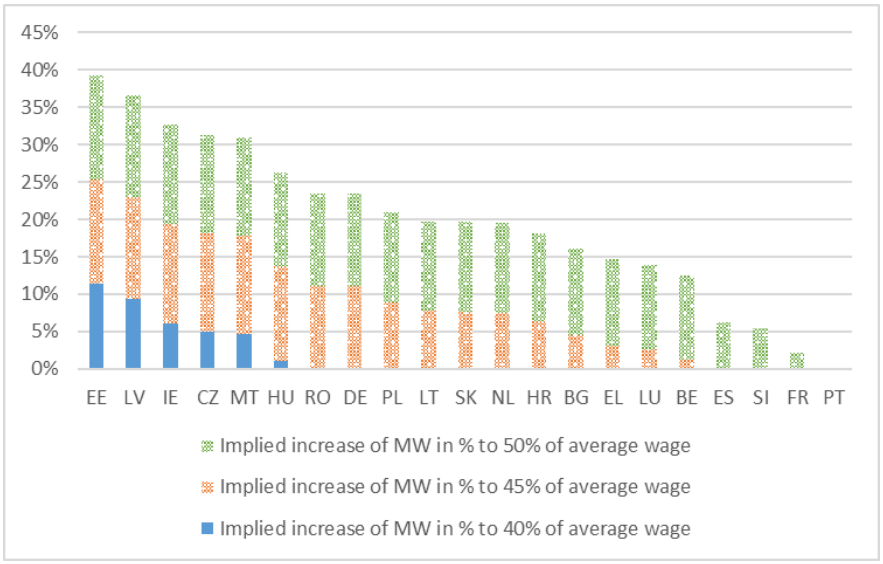
Poland. Meanwhile, an intermediate reference value of 45% of the average wage would imply increases for 17 Member States. These are, in addition to the ones below 40% in 2019: Belgium, Bulgaria, Croatia, Germany, Greece, Lithuania, Luxembourg, the Netherlands, Poland, Romania and Slovakia.

Graph A12.1: Implied minimum wage increases for various indicative reference values (%)

(a) Scenarios of minimum wages as a proportion of the median wage



(b) Scenarios of minimum wages as a proportion of the average wage



Source: Euromod simulations based on Eurostat data.

Table A12.1: Implied minimum wage increases for various indicative reference values, nominal monthly values, (Euro)

Countries	Statutory MW (2019)	40% of average wage		45% of average wage		50% of average wage		50% of median wage		55% of median wage		60% of median wage	
	Level	Level	Gap	Level	Gap	Level	Gap	Level	Gap	Level	Gap	Level	Gap
Belgium	1594	1434	-160	1613	19	1792	199	1584	-10	1742	148	1900	307
Bulgaria	286	266	-21	299	13	332	46	239	-48	262	-24	286	0
Czechia	519	545	26	613	94	681	162	580	61	638	119	695	177
Germany	1557	1537	-20	1729	172	1921	364	1680	123	1848	291	2016	459
Estonia	540	601	61	676	136	751	211	636	96	699	159	763	223
Greece	758	695	-63	782	24	869	111	761	3	837	79	914	155
Spain	1050	893	-157	1005	-45	1116	66	952	-98	1047	-3	1142	92
France	1521	1243	-278	1399	-122	1554	33	1288	-233	1417	-104	1546	25
Croatia	506	478	-28	538	32	598	92	510	4	561	55	611	106
Hungary	464	469	5	528	63	586	122	451	-13	496	32	541	77
Ireland	1656	1757	101	1977	321	2196	540	1886	230	2074	418	2263	607
Lithuania	555	532	-23	598	43	665	110	538	-17	591	36	645	90
Luxembourg	2071	1888	-183	2124	53	2360	289	1919	-153	2110	39	2302	231
Latvia	430	470	40	529	99	588	158	470	40	517	87	564	134
Malta	762	798	36	898	136	997	235	871	109	958	196	1045	283
Netherlands	1616	1545	-71	1738	122	1931	315	1662	46	1828	212	1994	378
Poland	523	506	-17	570	46	633	110	505	-18	555	32	606	82
Portugal	700	561	-139	631	-69	701	1	499	-201	549	-151	599	-101
Romania	446	440	-6	495	49	551	105	402	-44	443	-3	483	37
Slovenia	887	748	-138	842	-45	935	49	771	-116	848	-39	925	38
Slovakia	520	498	-22	560	40	622	102	515	-5	566	46	618	98

While more or less stringent reference values can be defined both in terms of the average and the median wage, both indicators have somewhat different implications for individual Member States. In particular, reference values based on the average wage are somewhat more stringent for Member States with generally lower or intermediate wage levels such as Bulgaria, Hungary, Portugal and Romania, while reference values based on the median wage are somewhat more stringent for some intermediate-to-higher wage countries such as Belgium, Germany, Greece, Malta, and the Netherlands.

Hypothetical minimum wage increases affect different shares of workers depending on the generosity of the minimum wage increases. In a majority of EU countries, more than 10% of workers would be affected by the largest minimum wage increase simulated in terms of the median wage (14 countries, see Graph A12.12). The largest share of workers affected would be observed in Greece, Poland, Spain and Ireland, with shares of workers between 30% and 20% affected in case of a minimum wage increase at 60% of the median wage.[257]

These shares can be used to obtain estimates of the number of beneficiaries of various hypothetical scenarios. In particular, to obtain these estimates, the share of workers affected, as simulated in Euromod, has been multiplied by the number of employees in the affected Member States in 2019. The results indicate that, if Member States increased their minimum wages to the highest reference values, wages could increase for 22 million workers (at 60% of the median wage) or 24 million workers (at 50% of the average wage). At intermediate reference values, the number of direct beneficiaries is estimated to be 11 million (55% of median wage) and 12 million (45% of the average wage). The difference is larger between both low reference values: if statutory minimum wages were increased to 50% of the median wage, this would increase wages for 5.4 million workers, while increases to 40% of the average wage would benefit 0.7 million workers.

The increase in the wages of beneficiaries would reach 20% in a number of countries under all scenarios. The average wage increase for the workers affected depends mainly on the initial level of the statutory minimum wage and the shape of the wage distribution close to the minimum wage, i.e. the number of workers above the statutory minimum wage that are affected when the minimum wage increases. For the highest scenario of minimum wages in terms of gross median income, the average wage increase would peak at 30% in Estonia and at 25% for Germany, Greece and Ireland (see Graph A12.3).

The simulated increase of the wage bill depends on both factors: the share of workers affected and the average increase in earnings triggered by the new minimum wage. The

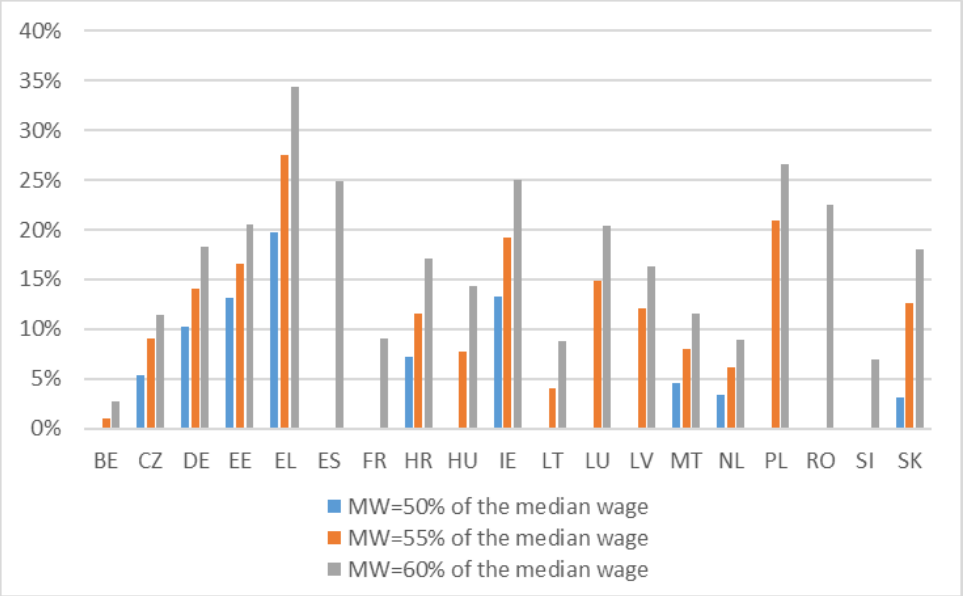
[257] Please keep in mind that the share of workers in the baseline simulation may not be identical to the share of workers earning the minimum wage in the descriptive statistics (Graph A7.1). This is because the methodology makes imputations about the working hours of some workers (see Annex A4.3).

largest increase in the wage bill would be recorded in Greece for a minimum wage at 60% of the gross median wage, i.e. a wage bill increase by more than 4%. Other EU countries displaying a large increase in the wage bill are Ireland, Estonia and Poland, in the light of the high number of workers affected and, in the case of Estonia, of the relatively low initial statutory minimum wage (see Graph A12.4).

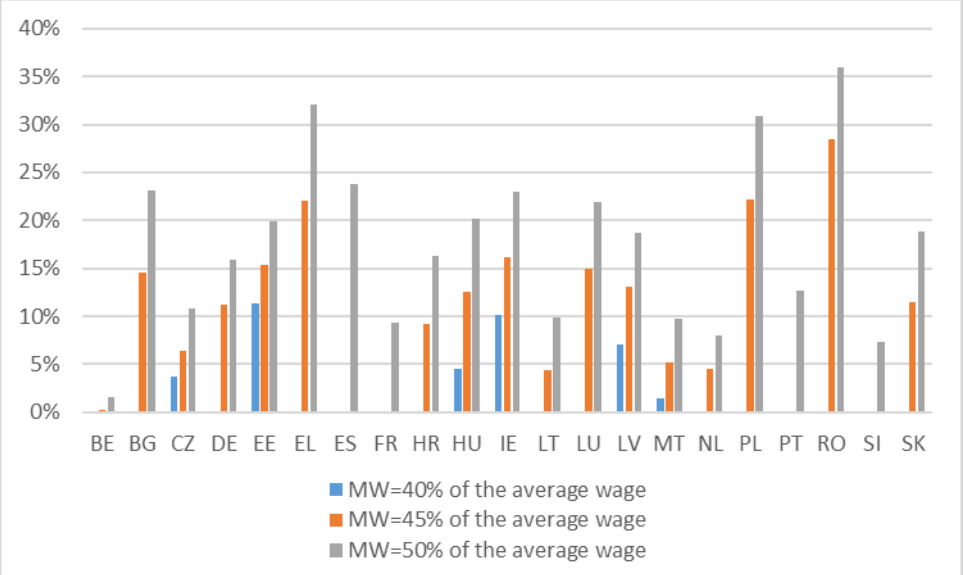
These country-specific results imply that higher reference values have a higher impact on aggregate wages at the EU level. These calculations are based on multiplying the estimated increases in the wage bill shown in Graph A12.4 by the wage bill in EU Member States in 2019. These calculations imply that minimum wage increases to the level of the highest reference values (60% of the median wage or 50% of the average) would imply increases in overall wages of about 1% at the EU level. Increases to intermediate reference values (i.e. 55% of the median wage or 45% of the average) would imply an overall wage increase of about 0.4%, while the lower reference values imply smaller increases: The estimated increase in the EU wage bill is about 0.2% with all statutory minimum wages at 50% of the median wage, while the increase is 0.01% at 40% of the average wage.

Graph A12.2: Share of workers affected by increases of the minimum wage (%)

(a) Scenarios of minimum wages as a proportion of the median wage



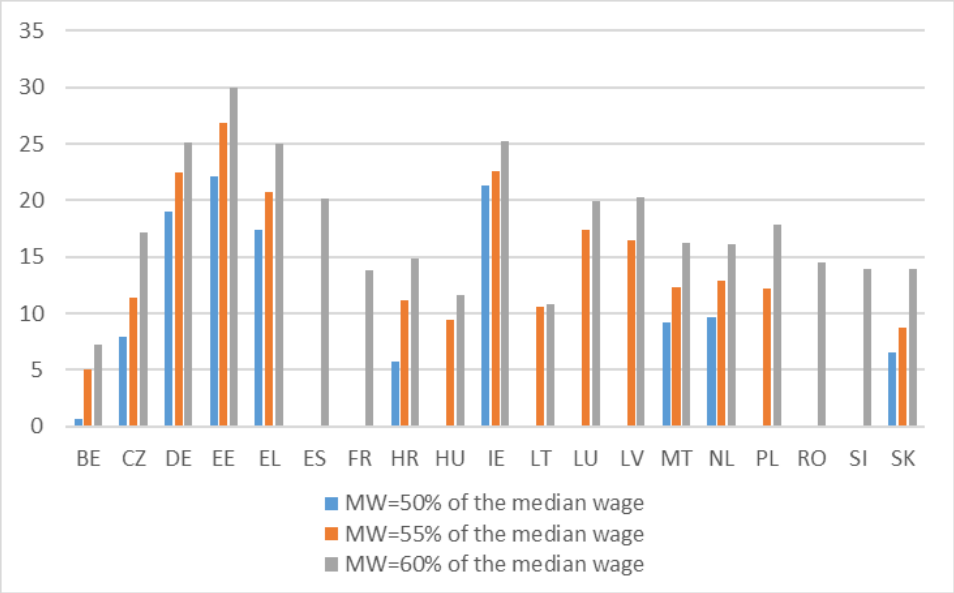
(b) Scenarios of minimum wages as a proportion of the average wage



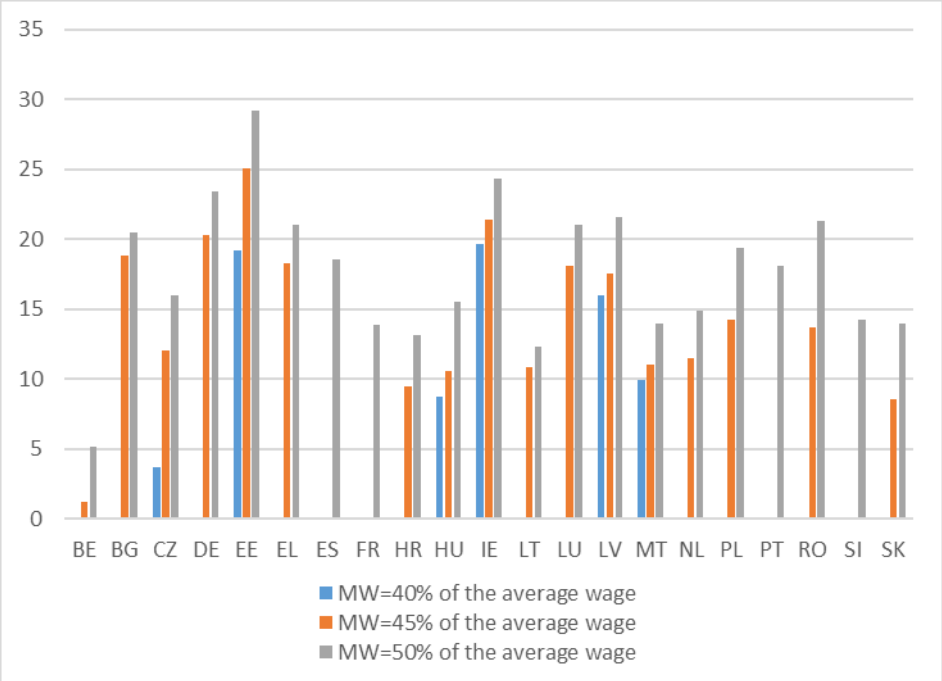
Notes: European Commission (JRC) calculations based on simulations with the Euromod microsimulation model. The baseline scenario reflects minimum wages in 2019. Countries sorted alphabetically. Countries with actual minimum wages above the hypothetical scenarios were excluded.

Graph A12.3: Average increase in the wages of those affected by increases in the minimum wage (%)

(a) Scenarios of minimum wages as a proportion of the median wage



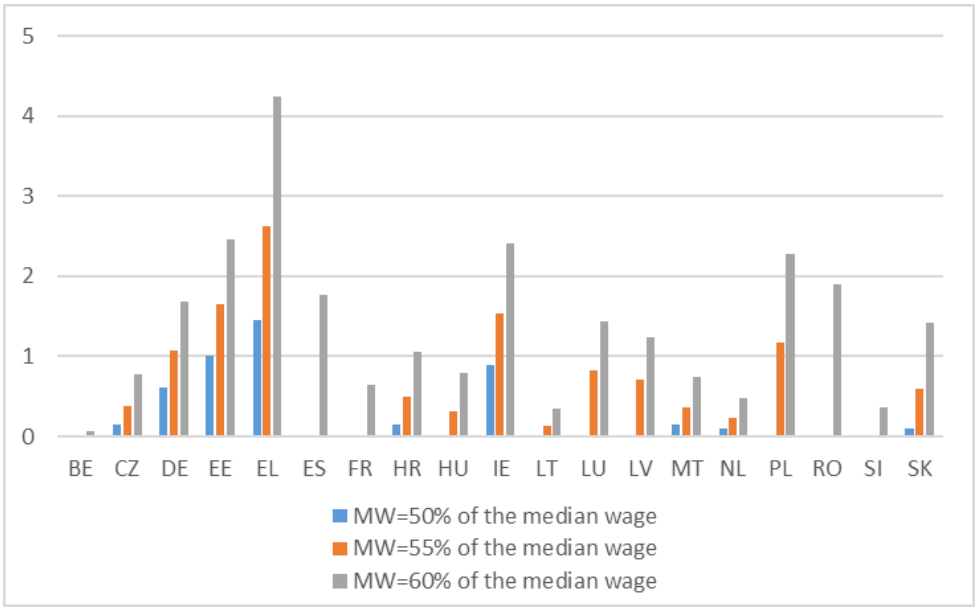
(b) Scenarios of minimum wages as a proportion of the average wage



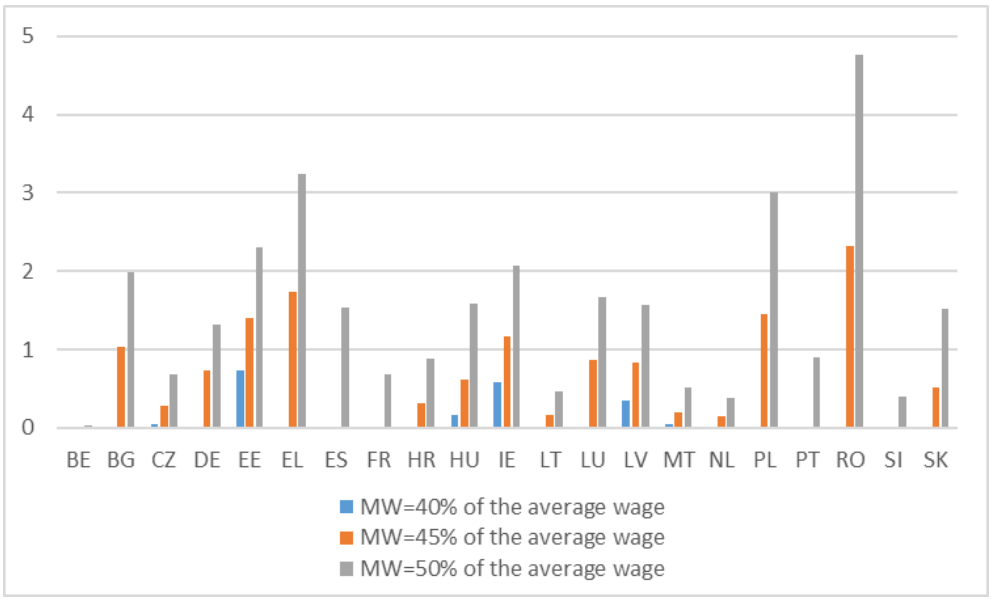
Notes: European Commission (JRC) calculations based on simulations with the Euromod microsimulation model. The baseline scenario reflects minimum wages in 2019. Countries sorted alphabetically. Countries with actual minimum wages above the hypothetical scenarios were excluded.

Graph A12.4: Change in the total wage bill as a result of changes in the minimum wages (%)

(a) Scenarios of minimum wages as a proportion of the median wage



(b) Scenarios of minimum wages as a proportion of the average wage



Notes: European Commission (JRC) calculations based on simulations with the Euromod microsimulation model. The baseline scenario reflects minimum wages in 2019. Countries sorted alphabetically. Countries with actual minimum wages above the hypothetical scenarios were excluded.

A12.2. Wage inequality, in-work poverty, gender pay gap

To estimate the magnitude of social impacts of increasing minimum wage adequacy, a microsimulation exercise has been conducted using the Euromod model.[258] The hypothetical scenarios simulated correspond to situations in which Member States with statutory minimum wages below a certain threshold raise it to this level. These hypothetical scenarios are defined in terms of ratios to the median and average wages.

A reduction of at least 10% in wage inequality would be observed in 12 Member States if the minimum wage were raised to 60% of the median wage. These countries are Czechia, Germany, Estonia, Spain, Ireland, Luxembourg, Latvia, Malta, Poland, Romania, Slovenia and Slovakia (see Graph A12.5). This decrease occurs from low initial values of wage inequality (as measured by the D5/D1 ratio) in Czechia, Poland and Slovakia and from high initial values in Spain and Ireland. The highest reduction in absolute terms of the D5/D1 wage ratio would be indeed achieved in Spain (over 0.6 reduction in the D5/D1 wage ratio). This inequality reduction is mainly due to the increase of the minimum wage level and the number of workers affected by the increase.

Eight EU countries would witness a reduction by more than 20% in in-work poverty should they increase their statutory minimum wage to a reference value of 60% of the median gross wage or 50% of the average (see Graph A12.6).[259] The most significant reductions in in-work poverty would be observed in Estonia, Greece and Romania were this would imply a decline in in-work poverty of more than 2 pps, but decreases reach 20% also in Germany, Hungary and Luxembourg, albeit from a lower baseline. Reductions would be lower, the most significant ones typically between 10% and 20% if minimum wages were increased to the intermediate reference values (45% of the average wage or 55% of the median), while they would remain close or below 10% for the lower values (40% of the average wage or 50% of the median).

In some countries such as Slovenia and the Netherlands, minimum wage increases do not always reduce in-work poverty in the simulations. This is due to increased taxes (in the Netherlands) and reduced means-tested benefits (in Slovenia) for some beneficiary households. It is possible that households would adjust their behaviour (working hours) in reaction to the minimum wage increase in such a case; however, such reactions are not modelled in these simulations. Alternatively, it is possible that parameters of tax-benefit systems are adjusted by governments, to keep incentives

[258] For a description of the methodology, see Annex A4.3.

[259] The indicator measures the share of persons aged 18 or over who are employed and have an equivalised disposable income below the at-risk-of-poverty threshold, which is set at 60 % of the national median equivalised disposable income (after social transfers). For the purpose of this indicator, an individual is considered as being employed if he/she was employed for more than half of the reference year.

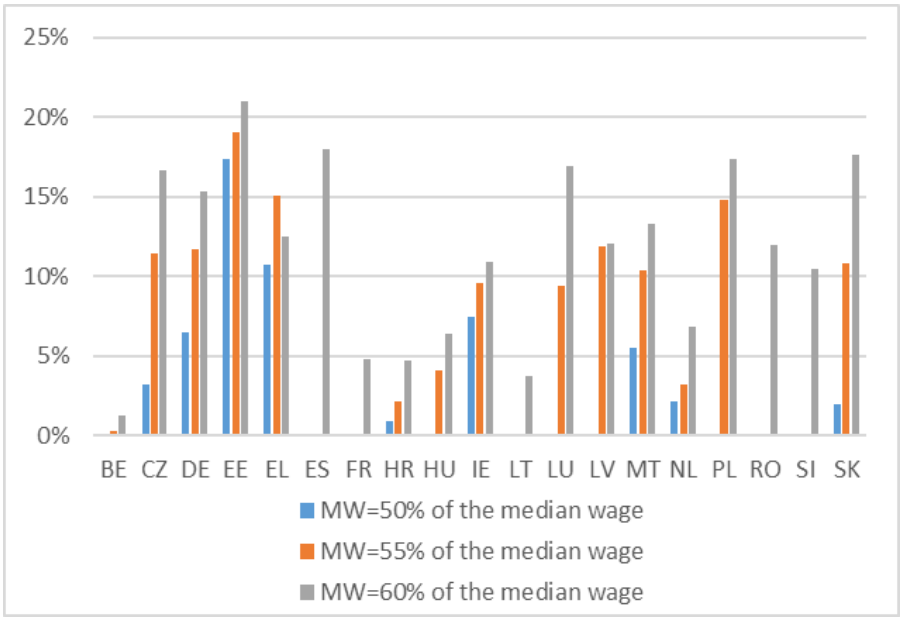
unchanged in the wake of adjusted minimum wages. Such adjustments are also not modelled if they are done in a discretionary, rather than automatic way.[260]

The pay gap in average wages between men and women declines in all EU countries as the minimum wage increases. For higher simulated increases of the minimum wage (for example 60% of the median wage), the gender pay gap declines by more than 10% in Greece, Spain, Romania and Slovakia (see Graph A12.7). More generally, the reduction in the gender pay gap is significant in a large majority of countries according to the simulated increases of minimum wage levels, including in some EU countries where the gap in average wages between men and women is high (e.g. Czechia, Latvia, Germany).

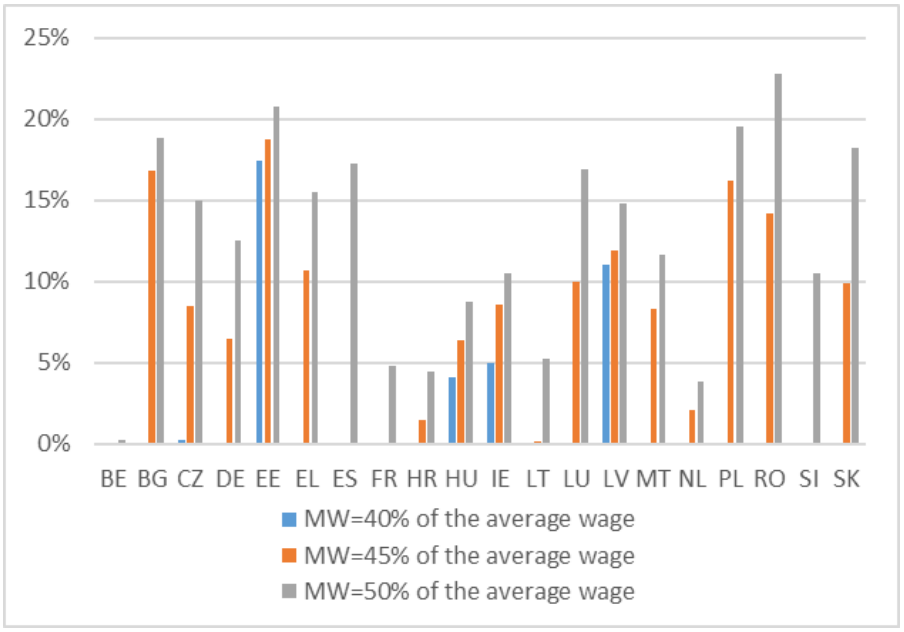
[260] Such adjustments may affect the fiscal impact of minimum wage increases. Accordingly, in the current simulations, minimum wage increases improve the budget balance in the Netherlands and Slovenia. Adjusting tax and benefit rules to keep social benefits of minimum wage increases positive would likely reduce these positive fiscal impacts.

Graph A12.5: Reduction in wage inequality in simulated hypothetical minimum wage scenarios, D5/D1 indicator (%)

(a) Scenarios of minimum wages as a proportion of the median wage



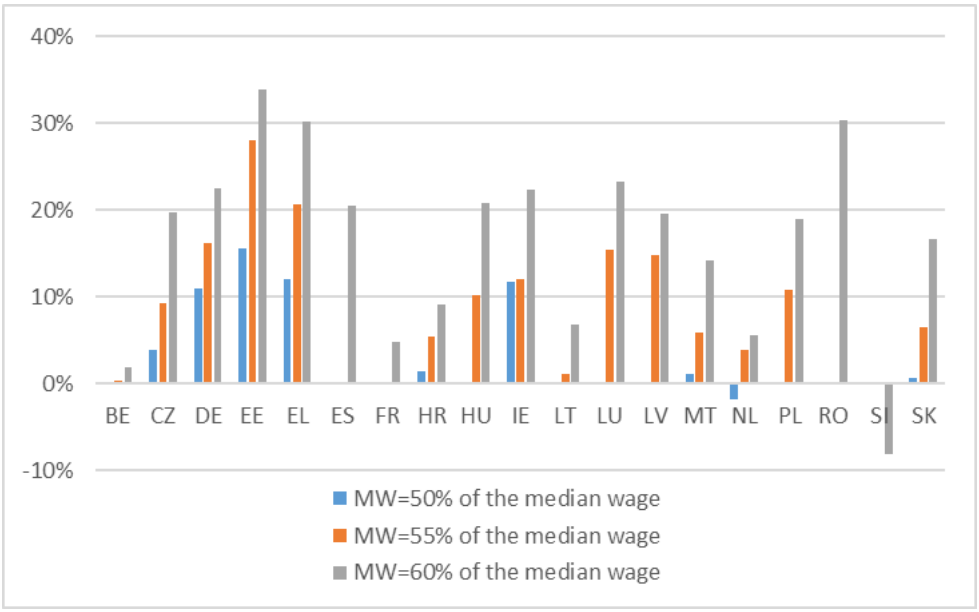
(b) Scenarios of minimum wages as a proportion of the average wage



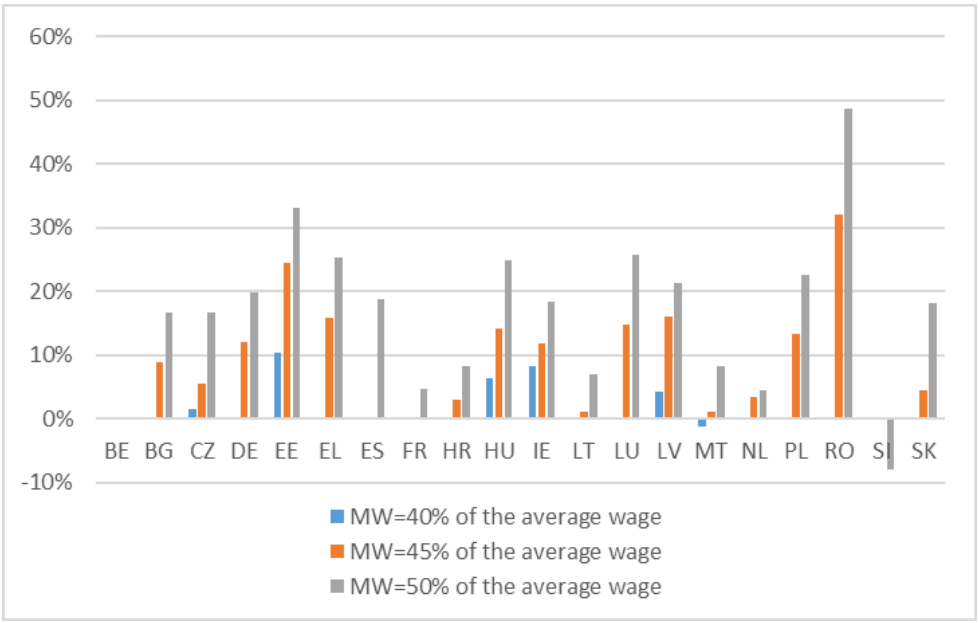
Notes: European Commission (JRC) calculations based on simulations with the Euromod microsimulation model. The baseline scenario reflects minimum wages in 2019. Countries sorted alphabetically. Countries with actual minimum wages above the hypothetical scenarios were excluded. The D5/D1 indicator is calculated as the gross wage earned by the median earner (D5) divided by the gross wage of the worker who earns more than 10% of all workers (D1).

Graph A12.6: Reduction in in-work poverty in simulated hypothetical minimum wage scenarios (%)

(a) Scenarios of minimum wages as a proportion of the median wage



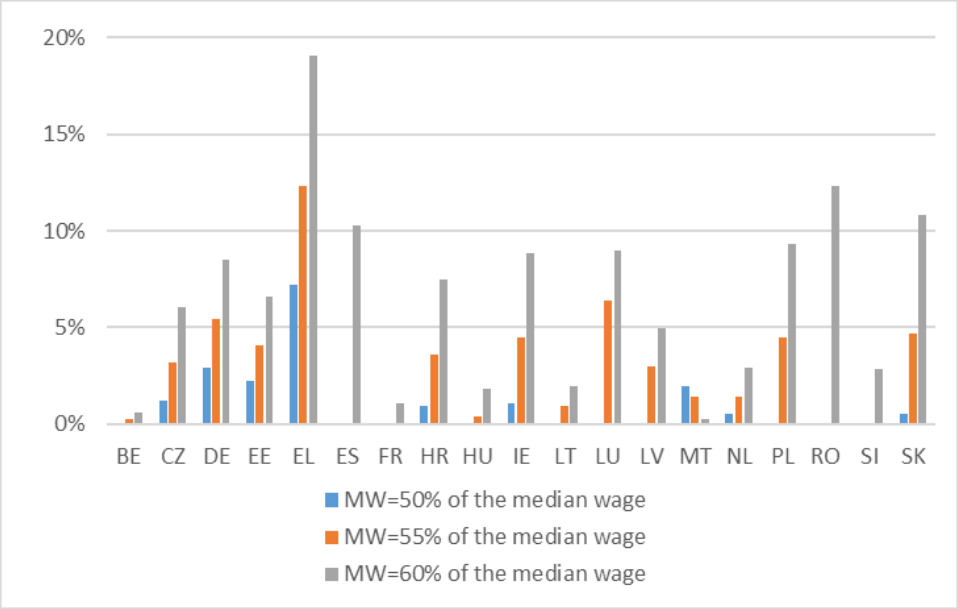
(b) Scenarios of minimum wages as a proportion of the average wage



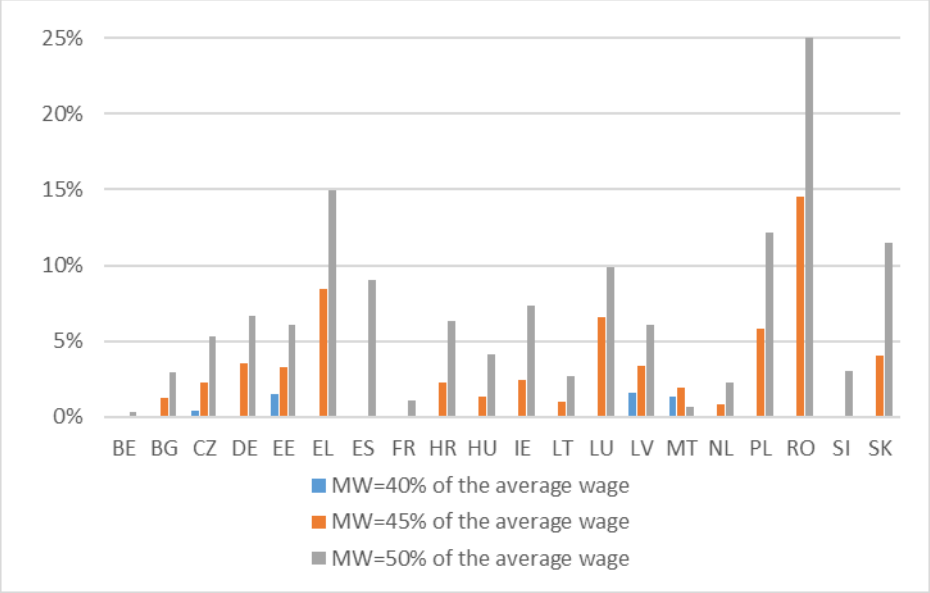
Notes: European Commission (JRC) calculations based on simulations with the Euromod microsimulation model. The baseline scenario reflects minimum wages in 2019. Countries sorted alphabetically. Countries with actual minimum wages above the hypothetical scenarios were excluded.

Graph A12.7: Reduction in the gender pay gap in simulated hypothetical minimum wage scenarios (%)

(a) Scenarios of minimum wages as a proportion of the median wage



(b) Scenarios of minimum wages as a proportion of the average wage



Notes: European Commission (JRC) calculations based on simulations with the Euromod microsimulation model. The baseline scenario reflects minimum wages in 2019. Countries sorted alphabetically. Countries with actual minimum wages above the hypothetical scenarios were excluded. The gender pay gap is the difference between average gross hourly wages of male and female employees as % of male wages, unadjusted for individual characteristics.

A12.3. Work incentives: Simulation results

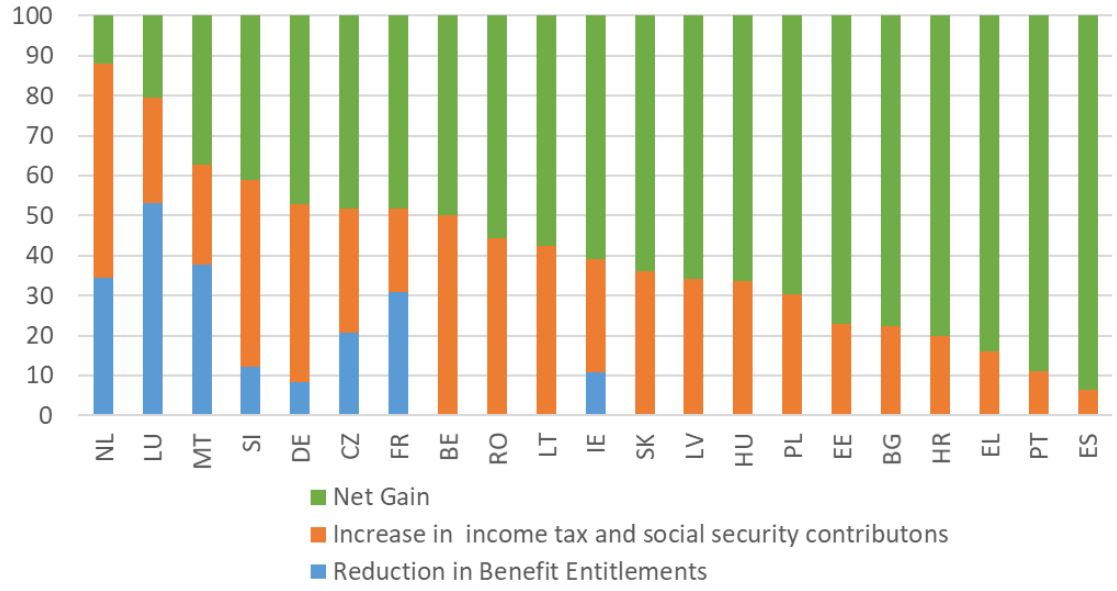
More adequate minimum wages improve incentives to work by increasing the take-home pay with an unchanged out-of-work income. The strength of this effect depends on the taxes and benefits applying to minimum wage earners. The improvements in work incentives are weaker if the increased income from work is partly lost due to higher taxes or benefits withdrawn (including unemployment benefits or last resort benefits such as minimum income schemes). In this case, taking up a job at the minimum wage raises income to a small extent relative to being out of work, which results in weak incentives to work. Therefore, the income gain from a certain increase in the minimum wage is likely to be the highest when taxes and benefits paid by minimum wage earners are low or when benefits are not withdrawn (including because minimum wage earners are not entitled to benefits at all).

Simulations show that, in all Member States, work incentives would improve when minimum wages are increased.[261] When the gross minimum wage is increased, this increases the net income of minimum wage earners, but it also increases the taxes they pay and may reduce the benefits they are entitled to. In a majority of Member States with a statutory minimum wage, the worker keeps 50% or more of a hypothetical minimum wage increase (Graph A12.8).

In countries where the tax-benefit system already supports low-wage earners to take up work, the net gain of these workers from increasing minimum wages is lower. This is because, in such systems, as in-work benefits are gradually withdrawn, income tax rates increase with increasing wage incomes. In particular, the net gains from a hypothetical minimum wage increase are below 30% in Luxembourg and the Netherlands. In contrast, the net gain is highest in systems where benefits are not withdrawn (often because minimum wage earners are not entitled to benefits at all). The progressivity of the personal income tax system has a similar effect: lower progressivity at the minimum wage implies a higher net gain, from a hypothetical minimum wage increase, and vice versa. In particular, the net gain is above 70% in Bulgaria, Croatia, Estonia, Greece, Hungary, Malta, Portugal, and Spain.

[261] Ad-hoc simulations conducted by the OECD based on the TaxBEN model. For more detail on the methodology, see Annex A4.4.

Graph A12.8: Net income gains as a share of net household income by components in the case of a 10% increase of the statutory minimum wage, 2019



Source: OECD simulations for the European Commission, based on the OECD TaxBen model.

A12.4. Impacts on employment

The effect of the minimum wage on employment is assessed based on Euromod simulations.[262] The relative magnitude of the employment effect is determined by a so-called "elasticity": the ratio of the percentage change in employment to the percentage change in the wages of minimum wage earners. The following simulations estimate the possible reduction in employment as triggered by increases in labour cost.

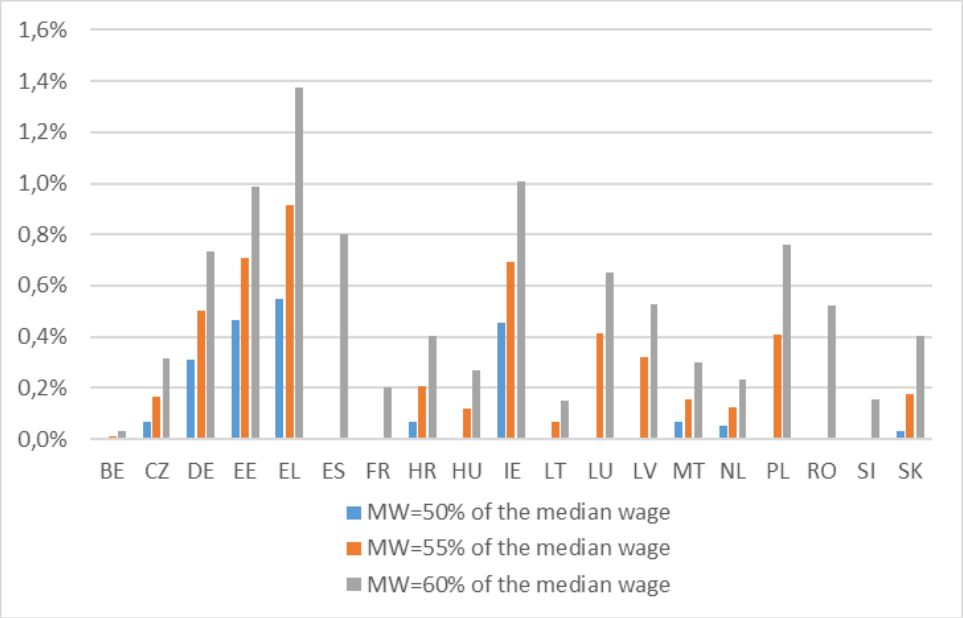
The calculations are based on an elasticity of -0.16, based on a central estimate of 48 international studies, including on EU Member States.[263] This elasticity means that when the wages of minimum wage earners increase by 10%, their employment is estimated to decrease by 1.6%, implying that the minimum wage raises wages of low-wage earners much more than its possible negative impact on jobs.

Possible negative employment effects would remain below 0.2% in most cases if all Member States increased their minimum wages to the lower reference values. The employment effect would exceed this in Estonia and Ireland in the case of 40% of the average wage and, in addition, in Germany, Greece and Luxembourg in the case of 50% of the median (see Graph A12.9).

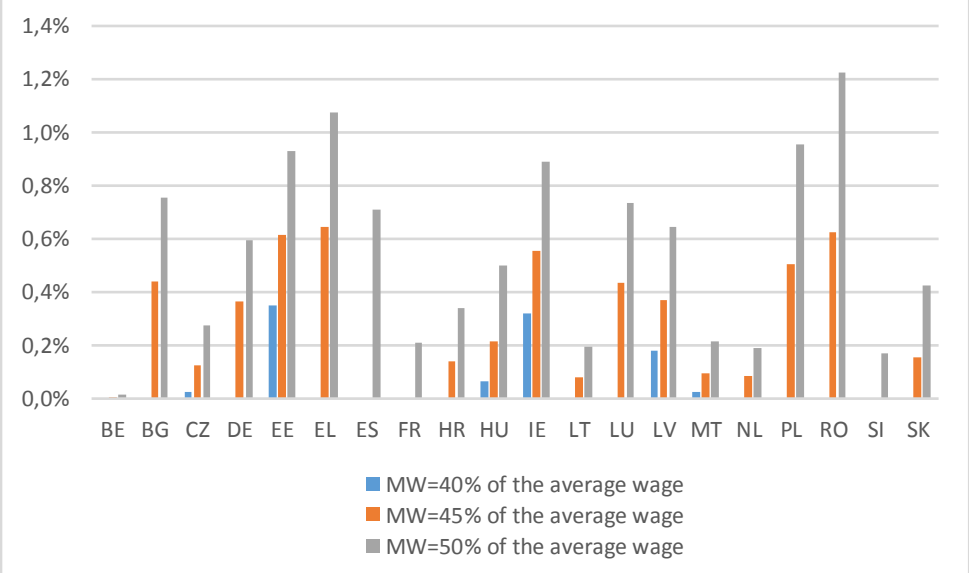
[262] For a more detailed description of the methodology, see Section A4.4 in Annex 4.
[263] The survey of recent academic studies has been compiled by Dube, A. (2019): "Impacts of minimum wages: review of the international evidence", report presented to the UK Low Pay Commission. A more detailed explanation of the simulation methodology of employment effects is provided by Annex A4.4.

Graph A12.9: Estimation of possible negative employment effects in simulated hypothetical minimum wage scenarios (%)

(a) Scenarios of minimum wages as a proportion of the median wage



(b) Scenarios of minimum wages as a proportion of the average wage



Notes: Calculations are based on Euromod simulation outputs by the European Commission (JRC). The baseline scenario reflects minimum wages in 2019. Countries are sorted alphabetically. Countries with actual minimum wages above the hypothetical scenarios were excluded.

A12.5. Impacts on consumption and prices

a) Impact on consumption

This section presents the results of the analysis undertaken to provide a tentative estimate of the impact of the minimum wage on mean consumption expenditure by consumption quintile for 17 Member States and the UK.[264] There is a positive relation between minimum wage increases and consumption. The impact differs across the consumption distribution and is the highest for the bottom of the consumption distribution and gradually increases across the distribution. This is not surprising as the low-income households are mostly affected by the minimum wage hike and most likely to be concentrated at the bottom of the consumption distribution.[265]

Data and econometric approach

Data on the percentage change in mean consumption expenditure per adult (adjusted for household composition, in PPS) between 2005 and 2010 by quintile and country is obtained from the Household Budget Surveys. The main explanatory variable is the percentage change in the monthly minimum wage in PPS. In order to test whether the effect of an increase in the minimum wage varies between consumption quintiles, interaction terms between quintile dummies and minimum wage growth are included. To isolate the effect of minimum wage changes from changes due to average wages, the percentage change between 2005 and 2010 in annual net earnings (in PPS) for a single individual earning 100% of the average wage is introduced in the regression as control variable. As a robustness check, the average wage is replaced with the percentage change in GDP per capita (in PPS) between 2005 and 2010 obtained from Eurostat.

Results

Table A12.2 shows the results obtained from four different specifications. The first two columns present the result of a simple model that includes no interaction effects with the consumption quintile, but controls for respectively the average wage growth (Model A) and GDP per capita growth (Model B). The last two columns present estimations of the full model, including interaction terms with the consumption quintiles and respectively average wage growth (Model C) and GDP per capita growth (Model D). Interaction terms allow identifying the effect that is specific to each quintile.

[264] The Member States included are Belgium, Bulgaria, Czech Republic, Estonia, Greece, Spain, France, Ireland, Lithuania, Latvia, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, and Slovenia.
[265] European Commission (2016): LMWD 2016 Report, DG EMPL, p. 92.

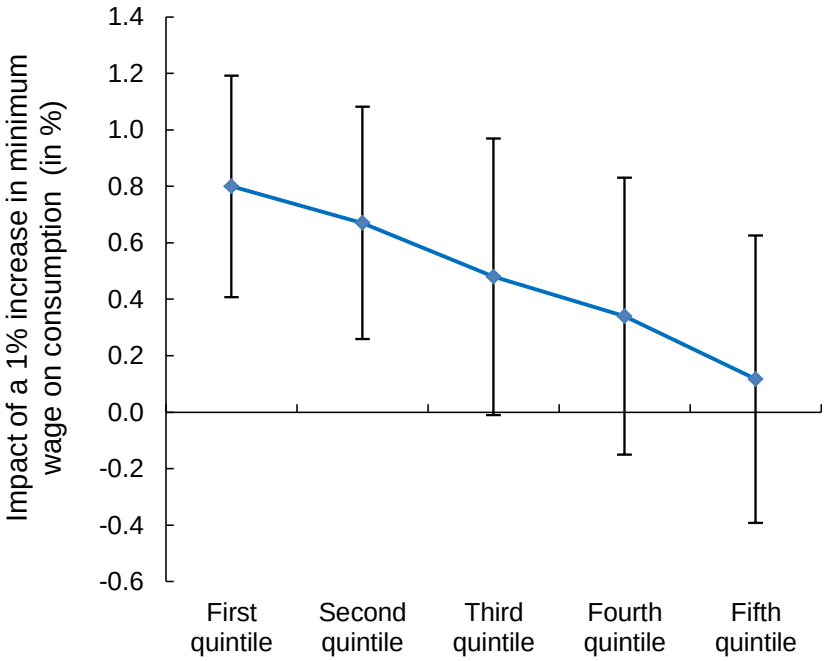
Table A12.2: Econometric evidence: Impact of the minimum wage on consumption by income quintile

Dependent variable: Mean consumption expenditure per adult equivalent, % in change in PPS	(1) Model A	(2) Model B	(3) Model C	(4) Model D
Minimum wage (MW), % in change in PPS	0.48**	0.33**		
	(0.19)	(0.14)		
Average wage, % in change in PPS	0.73***		0.73***	
	(0.20)		(0.19)	
GDP per capita, % in change in PPS		1.16***		1.16***
		(0.17)		(0.11)
First quintile* MW			0.80***	0.67***
			(0.20)	(0.13)
Second quintile* MW			0.67***	0.53***
			(0.21)	(0.11)
Third quintile* MW			0.48*	0.31***
			(0.25)	(0.11)
Fourth quintile* MW			0.34	0.19*
			(0.25)	(0.11)
Fifth quintile* MW			0.12	-0.04
			(0.26)	(0.12)
Constant	-0.087**	-0.059**	-0.087***	-0.059***
	(0.033)	(0.026)	(0.032)	(0.024)
Observations	80	90	80	90
R-squared	0.56	0.64	0.63	0.73

Notes: (1) OLS estimates. Robust standard errors. Model A and C which include the percentage change in the average wage as an explanatory variable do not include Estonia and Slovakia because of missing data. Asterisks indicate estimated coefficients that are statistically significant at the 1% (***), 5% (**), or 10% (*) level. Data on the percentage change in mean consumption expenditure per adult equivalent (in PPS) between 2005 and 2010 by quintile and country are obtained from the Household Budget Surveys.
Source: Commission services, based on Eurostat.

The results indicate that there is a positive impact on aggregate consumption. Yet, this impact is more precisely estimated when the response of aggregate consumption is conditional to different income quantiles. The effect of a minimum wage increase is found to be larger for the lowest quintile and gradually decreasing across the income distribution. The results presented by Model C and D show that a 1% increase in the minimum wage leads to an increase in consumption in the ballpark of 0.7% in the bottom quintile and of 0.6% in the second quintile. The effect decreases rapidly to respectively 0.4%-0.3% in the third quintile. There is no significant effect of minimum wage hikes on consumption for the two highest quintiles of the consumption distribution at a 5% significance level. Graph A12.10 summarizes the impact of the minimum wage showing the effect per quintile and the corresponding confidence interval.

Graph A12.10: Impact of the minimum wage on consumption by income quintile



Note: OLS estimates based on the results reported in Model C in Table A12.1, using the percentage change in the average wage as an explanatory control variable.
Source: Commission services, based on Eurostat.

A potential caveat of the analysis is that it does not include some time-varying factors that differ between countries, such as budgetary restrictions, which may affect both consumption and minimum wages. This may create endogeneity bias. An additional bias could come from the exclusion of factors that affect consumption in a specific quintile, such as indexation of benefits in line with minimum wage changes affecting incomes in the lowest quintiles. As result, the estimates can be biased and potentially overestimate the effect of the minimum wage. Yet, they show that minimum wage changes have a stronger impact on consumption at the bottom rather than at the higher part of the consumption distribution.

b) Impact on prices

The analysis looks at the impact of the minimum wage on consumer prices for 12 product categories[266] in 19 EU Member States (plus UK)[267] with a statutory national minimum wage.

[266] The product categories (COICOP categories - one digit) included are alcoholic beverages, tobacco and narcotics; clothing and footwear; communications; education; food and non-alcoholic beverages; furnishings, household equipment and routine household maintenance; health; housing, water, electricity, gas and other fuels; miscellaneous goods and services; recreation and culture; restaurants and hotels; and transport.
[267] The EU Member states included are Belgium, Bulgaria, Czech Republic, Estonia, France, Croatia, Hungary, Ireland, Latvia, Lithuania, Luxemburg, Malta, Netherlands, Poland, Portugal, Romania, Slovenia, Slovakia, and Spain.

The analysis covers the period January 2005-March 2016. Price changes (increases and decreases) after an increase in the minimum wage are tabulated. Two cases are considered: (1) an increase in the minimum wage in the last two months and (2) no increase in the minimum wage in the last two months. The impact in a specific month of a minimum wage change on prices is estimated using an econometric model lining the percentage change in consumer prices for a specific product category in a given country on the percentage change in the national statutory minimum wage of that country.

In addition to the contemporaneous and lagged percentage changes in the minimum wage, the model also includes the change in the minimum wage of the following year to control for potential expectations firms may have on *future* changes in the minimum wage. Further, the model controls for the lagged change in prices (to account for persistency overtime of price changes) and product–country, month–country, month-product and year fixed effects. These fixed effects are introduced to net out the remaining unobserved components affecting price changes and isolate the effects due to minimum wage changes. The analysis also estimates the impact of minimum wage hikes on the price of the consumer basket by income level.

Table A12.3 presents the results of the descriptive evidence on price changes following an increase in the minimum wage. The results show that in case there was an increase in the minimum wage in the two months before, there were significantly more increases in prices (60.1%) compared to periods when there was no increase in the minimum wage in the past two months (53.4%). The reverse holds for price decreases (i.e. price decreases are less frequent in two months that follow minimum wage rises). With respect to the magnitude of the price changes, the results suggest that price changes (both increases and decreases) are larger after minimum wage hikes but quite rare compared to the case of no minimum wage change.

Table A12.3: Descriptive evidence: Impact of minimum wage increases on consumer prices

Minimum wage increase in the past two months	Yes	No
A. Share of price changes		
Percent increases	60.1	53.4***
Percent decreases	27.5	29.7***
B. Size of the price changes		
Mean price change (%) increase	0.74	0.82**
Mean price change (%) decrease	-1.72	-1.09***

Notes: 1) Asterisks indicate estimated effects that are statistically significant at 1% (***), 5% (**), or 10% (*) level.
Source: Commission services, based on data from Eurostat and national statistics.

Table A12.4 presents the results of the regressions for different specifications of the baseline model. The results are relatively robust across the estimations.[268]

Table A12.4: Econometric evidence: Impact of minimum wage increases on consumer prices

	(1) Model A	(3) Model B	(2) Model C	(5) Model D	(4) Model E
Lagged consumer prices, % change		-0.052	-0.153	-0.049	-0.148
		(0.11)	(0.12)	(0.11)	(0.12)
Minimum income, % change	0.0048	0.021***	0.062***	0.021***	0.061***
	(0.012)	(0.0070)	(0.013)	(0.0070)	(0.012)
Lagged minimum income, % change				0.010**	-0.012
				(0.0047)	(0.0085)
Two period lagged minimum income, % change				-0.0012	-0.013
				(0.0046)	(0.0086)
Future minimum income, % change				0.0051*	0.0044
				(0.0031)	(0.0042)
Product-country fixed-effects	Yes	Yes	Yes	Yes	Yes
Month-country fixed-effects	No	Yes	No	Yes	No
Month-product fixed-effects	No	No	Yes	No	Yes
Year fixed-effects	No	Yes	Yes	Yes	Yes
	0.202***	-0.099	0.089*	-0.087	0.108*
Constant	(0.0052)	(0.121)	(0.054)	(0.123)	(0.056)
Observations	32158	32158	32158	31439	31439
R-squared	0.000	0.073	0.335	0.073	0.337

The effect of the contemporaneous change in the minimum wages on prices is significant in all specifications except model A, which includes the least control variables and can therefore be considered as less reliable. In case it is significant, its effect ranges between 0.021 (model including month-country fixed effects) and 0.062 (model including month-product fixed effects). In addition, in case of model E, which includes month-country effects, the effects of the lagged and lead minimum wage increase are also found to be significant. The combined effect of a 10% increase in the minimum wage is expected to lead to a price increase of roughly 0.4%.[269] Hence, overall the results imply that a 10% increase in the minimum wage leads to 0.4% to 0.6% increase in consumer prices.

In order to provide some insights on the impact of minimum wage increases on prices for Graph A12.11 the results of the combined effect (including the coefficients for the contemporaneous time period, lagged time period and lead period if significant) of a

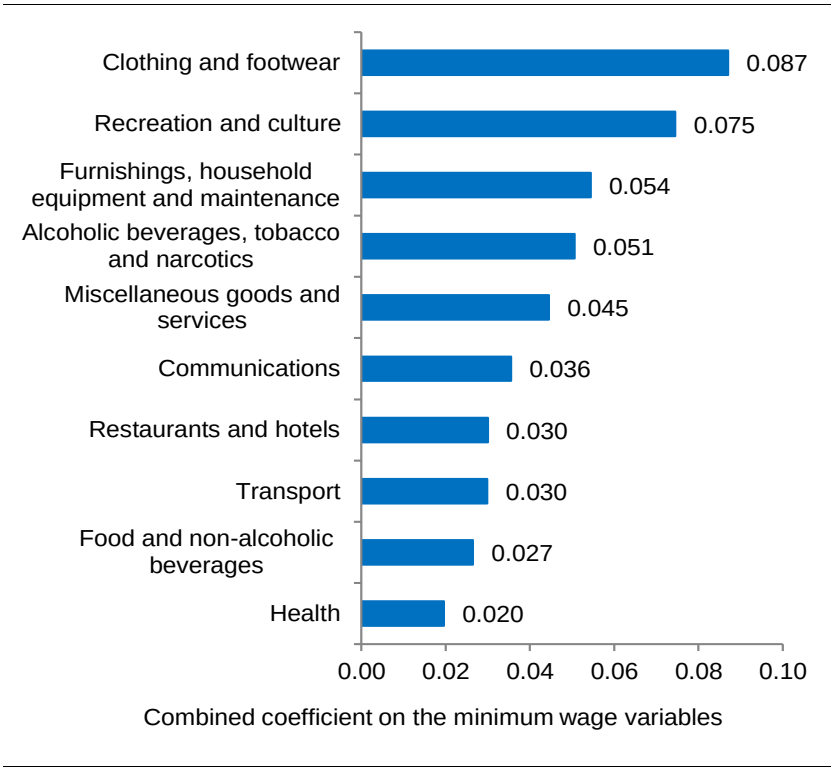
[268] In an additional robustness check, the probability of a price increase is used at the place of the price increases as outcome variable. Results are in line with expectations; an increase in the minimum wage significantly lowers the probability of a price increase.

[269] Note that in the model that includes month-country fixed effects, the effect of a minimum wage increase is lower than in the other models. Month-country fixed effects allow controlling for country-specific seasonality of prices. However, in case for example minimum wage increases happen in January and price increases also mainly happen in January, this specification will attribute price increases to the seasonal price change (i.e. occurring every 1 January), rather than to an increase in the minimum wage.

minimum wage increase on prices of particular product categories using a regression that includes month and year fixed effects and is equivalent to model E.

The combined impact ranges from 0.087 for clothing and footwear to 0.020 for health. No significant effect is found for education and housing, water, electricity, gas and other fuels. The effect of the minimum wage on consumer prices is found to be the highest for the following three product categories: clothing and footwear; recreation and culture; and furnishings, household equipment and routine household maintenance.

Graph A12.11: Combined effect of the minimum wage variables on prices by product category



Notes: (1) Based on an estimation of equation that includes month-country fixed effects and year fixed effects. Only effects significant at 10% (*) or lower levels are included in the combined effect.
Source: Commission services, based on data from Eurostat and national statistics.

A12.6. Introduction of the statutory minimum wage in Ireland and Germany

Ireland

In Ireland, a statutory minimum wage was introduced in 2000, affecting more than 20% of employees. An evaluation of the introduction of the minimum wage based on a company survey found little to no effect on employment. In particular, "employment growth among firms with low-wage workers prior to the legislation was no different from that of firms not affected by the legislation." There was some evidence of negative employment effects in the case of a small group of firms that did not originally intend to increase their wages towards the new minimum wage level. [270]

Analyses of the impact of the Irish minimum wage on wage inequality and poverty found that the minimum wage reduces wage inequality at the bottom of the wage distribution, including by so-called "spill-over effects", whereby workers earning above the minimum wage also experienced a wage rise. These spill-overs extend to the 30th percentile of the wage distribution.[271]

More recent studies found that the minimum wage is a relatively blunt tool to reduce poverty, but still effective to protect the wages of low-skilled workers. It has been shown that 17 per cent of minimum wage employees belong to a household that is at risk of poverty, compared to 3.3 per cent of non-minimum wage employees.[272] At the same time, some minimum wage workers in Ireland are located in high-income households.[273] It has also been suggested that the Irish minimum wage is an effective tool in protecting the income of low-skilled workers, particularly during recessions.[274]

Germany

In 2015, a statutory minimum wage was introduced in Germany. This event offered a rare opportunity to evaluate the effects of a new minimum wage policy on workers, firms and an economy.[275]

Hourly wages of employees earning less than the 2015 minimum wage increased by 14% on average between 2014 and 2016. This increase affected around 15% of the German

[270] O'Neill, D., B. Nolan, and J. Williams (2006). "Evaluating the introduction of a National Minimum Wage: evidence from a new survey of firms in Ireland", *Labour: Review of Labour Economics and Industrial Relations*, Vol. 20, no. 1, pp. 63–90.
[271] Redmond, P. (2020): Minimum wage policy in Ireland. Budget perspectives 2021 paper 2, May 2020.
[272] Maitre, B., S. McGuinness, and P. Redmond (2017). "A study of minimum wage employment in Ireland: the role of worker, household and job characteristics", Dublin: Economic and Social Research Institute.
[273] Redmond, P., K. Doorley and S. McGuinness (2020). "The impact of a minimum wage change on the distribution of wages and household income", IZA Discussion Paper No. 12914, Bonn: IZA.
[274] Holton, N. and D. O'Neill (2017). "The changing nature of Irish wage inequality from boom to bust", Economic and Social Review, Vol. 48, No. 1, pp. 1–26.
[275] For an overview of findings, see: Bruttel, O., "The effects of the new statutory minimum wage in Germany: a first assessment of the evidence." *Journal for Labour Market Research*, 53(1), 10, 2019.

workforce.[276] This, however, did not appear to translate into a significant impact on monthly gross wages, possibly due to a lowering of contractually agreed working hours.

At the macro level, employment developed positively after the introduction of the minimum wage, increasing more in 2016 and 2017 than in 2014. Regular jobs were not affected by the minimum wage introduction, but a decline in marginal part-time employment (so-called 'Minijobs') could be observed.[277] Another study with more detailed data confirms that there were no employment effects and emphasises that many workers moved to better jobs after the introduction of the minimum wage.[278]

No negative effects for businesses could be observed in terms of overall company profits, increased competition or market exits.[279] At the level of firms directly affected by the minimum wage, however, labour costs increased on average by 6 percent more than the labour costs of non-affected firms.[280] Reactions of employers have included increasing qualification and proficiency requirements, reducing working hours, increasing work intensity and increasing prices. There does not seem to have been an impact on productivity.[281]

A12.7. Youth minimum wages and youth employment: A survey

Cross-country evidence has been presented in the academic literature to suggest that sub-minimum wages for young workers have some effect in increasing youth employment. Using a sample of 17 OECD countries for the period 1975-2000, Neumark and Wascher (2004) find that the apparent disemployment effects of minimum wages are smaller in the countries that have a sub-minimum wage for young workers.[282]

Recent studies of policy episodes in specific EU Member States find a variety of results but, in contrast to the cross-country evidence, most do not support significant negative employment effects of youth minimum wages.[283] Studies focusing on one particular country have typically exploited reform episodes or differences in rules applying to workers with a small age difference (so-called "discontinuities" in policy design).

[276] Dustmann, Ch., A.Lindner, U. Schönberg, M. Umkehrer, and Ph. vom Berge. (2020). "Reallocation Effects of the Minimum Wage: Evidence From Germany", CREAM Discussion Paper 07/20, University College London.
[277] See Bruttel (2019), cited above.
[278] Dustmann, et al. (2020, op. cit.)
[279] Mindestlohnkommission, "Zweiter Bericht zu den Auswirkungen des gesetzlichen Mindestlohns", 2018.
[280] Bossler, M., Gürtzgen, N., Lochner, B., Betzl, U., Feist, L., Wegmann, J., "Auswirkungen des gesetzlichen Mindestlohns auf Betriebe und Unternehmen", *IAB-Forschungsbericht*, No. 4/2018, Institut für Arbeitsmarktund Berufsforschung (IAB), Nürnberg, 2018.
[281] See Bruttel (2019), cited above, and the references therein.
[282] Neumark D. and W. Wascher (2004), "Minimum wages, labor market institutions and youth employment: a cross-national analysis", Industrial Labor Relations Review 57: 223–248. More recently, Marimpi and Koning (2018) find support for these findings based on cross-national data from 30 OECD countries for the time period 2000–2014. See: Marimpi, M. and P. Koning (2018), "Youth minimum wages and youth employment", IZA Journal of Labor Policy 7(5).
[283] See also the summary by Boeri, T. and J. van Ours (2013): "The Economics of Imperfect Labour Markets", second edition, pp. 52-56, Princeton University Press.

Sharp increases in the youth minimum wage in Portugal in the late 1980s were found not to have negative employment effects by Portugal and Cardoso (2006).[284] The study finds that, after the minimum wage increase, teenagers were more likely to stay on their jobs than before. This was compensated by a reduction in newly created jobs for young workers.

More recently, in Belgium, the European Commission (2017) and Lopez-Novella (2018) estimated the effect of the gradual elimination of youth sub-minima for those between 18 and 20 years old.[285] Despite the significant increase in the youth minimum wage, they find no significant impact on youth employment (European Commission) and only a limited effect on labour flows (Lopez-Novella, 2018): like in the case of Portugal previously, young workers were more likely to stay in their jobs after the minimum wage increase, while the hiring of new young workers slowed down.

In the Netherlands, Van der Werff and co-authors have estimated the impact of the 2017 increase in the sub-minimum wage of young workers between 18 and 22 years old.[286] They find only a very small effect on employment (0.3 to 0.4 pps), which they relate to the fact that employers are partially compensated for the increase in the wage costs. The increase in the number of hours worked per week is more significant (between 0.2% and 1.2%) as well as the increase in the average wage (2% to 3%), although it remains smaller than the increase in the minimum wage.

[284] P. Portugal, A.R. Cardoso (2006): "Disentangling the Minimum Wage Puzzle: An Analysis of Worker Accessions and Separations", *Journal of the European Economic Association*, Vol. 4, No. 5 (Sep., 2006), pp. 988-1013.
[285] European Commission (2017), "Labour market and wage developments in Europe: Annual review 2017", DG Employment, Social Affairs and Inclusion: https://op.europa.eu/en/publication-detail/-/publication/2df2eaca-b3b0-11e7-837e-01aa75ed71a1/language-en; Lopez-Novella, M. (2018), "Removing youth sub-minimum wage rates in Belgium: did it affect youth employment? Federal Planning Bureau Working Paper 04-18, Federal Planning Bureau, Brussel.
[286] Van der Werff, S., Zwetsloot, J. and B. ter Weel (2018), "Verkenning effecten aanpassing minimum(jeugd)loon: De invloed van de verhoging van het wettelijk minimumloon voor 18- tot en met 22-jarigen op de werkgelegenheid en bbl-instroom", SEO Economisch Onderzoek, Amsterdam.

A12.8. Impacts on public budgets: Results from Euromod simulations

Minimum wages affect public budgets in a number of ways. As direct costs, higher minimum wages may increase the public sector wage bill, due to possible links of public sector pay scales to the minimum wage, to spill-over effects on the (public) wage distribution or in the case that a share of public-sector employees earn the minimum wage. Higher minimum wages may also increase the cost of some public procurements.[287] This effect is, however, likely more than counterbalanced by indirect effects on public revenues.

An increase in the minimum wage raises revenues from labour taxes and contributions. This effect is indirect but larger in most cases than any negative effect on the public sector wage bill, since only few public employees earn wages close to the minimum wage. For instance, a recent study for the Netherlands estimates that increased revenues from labour taxes and benefits exceed direct costs related to the public wage bill by a factor of between 4 and 5.[288] Minimum wages also may have an effect on the expenditure on social benefits and on other tax revenues in a way that may vary across countries. In some countries, increased wages may imply a reduced expenditure on benefits aiming to support working families (e.g. in-work benefits, for instance in Ireland). On the other hand, benefits expenditure may increase in countries (e.g. in the Netherlands and Lithuania) where some social benefits are automatically linked to the minimum wage.[289]

Further impacts may accrue through taxes on corporations and consumption, as well as second-round effects. Depending on the extent to which corporations are able to pass through increased labour costs into prices, revenue from corporate income taxes may be negatively affected by minimum wage increases. In turn, higher household income may increase consumption and revenues from consumption taxes. Finally, second-round effects also play a role, in particular possible negative employment effects. In the case of very large increases in the minimum wage, significant negative employment effects may materialise. In this case, public finances are negatively affected by lower revenues and higher spending on unemployment and other benefits.

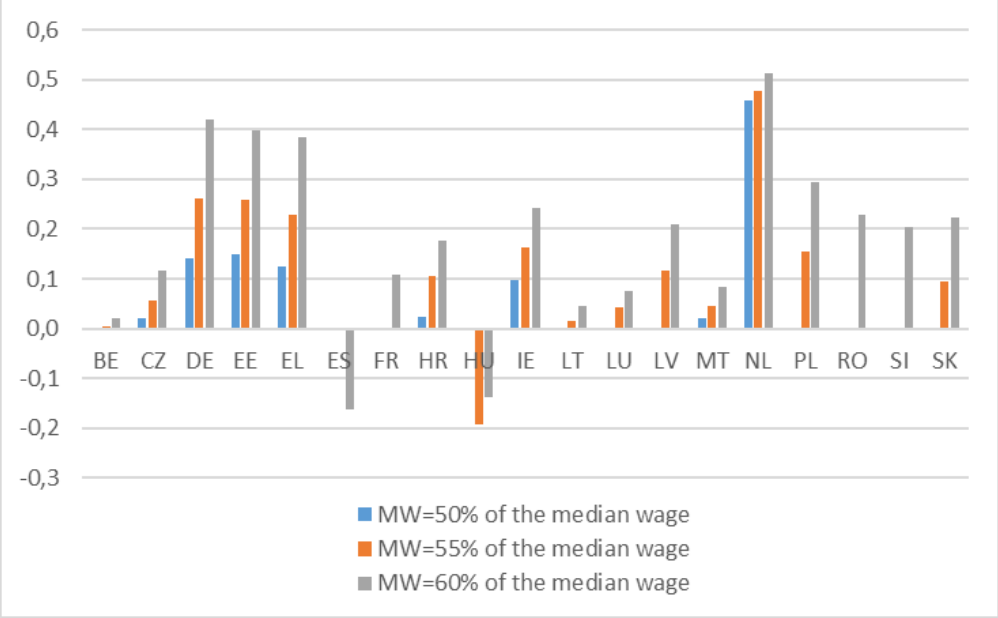
According to analysis done with the Euromod microsimulation model, minimum wage increases have a small but positive effect on public budgets.[290] In scenarios in which Member States raise their minimum wages to 50%, 55% or 60% of the median wage, or 40%, 45% or 50% of the average wage, these fiscal effects are estimated to be positive in most cases, driven by increases in tax revenues and reductions of benefit

[287] See, for an explanation of these effects in the case of the US: Congressional Budget Office (2019): "The Effects on Employment and Family Income of Increasing the Federal Minimum Wage".
[288] K. Zandvliet, E. de Vleeschouwer, R. van Oostenbrugge, R. Rey (2019): "Budgettaire effecten van verhoging van het minimumloon", SEOR BV, Rotterdam.
[289] The links between minimum wages and benefits may in some cases not be automatic. In such cases, impact assessments may differ based on the assumptions they make on these links.
[290] For a description of the methodology, see Annex 4.

expenditure (Graph A12.11). Possible second-round effects are not taken into account in the simulations, nor are impacts on company taxation. The magnitude of these effects is small; the overall improvement of public budgets is smaller or close to 0.1% of GDP in the scenarios implying smaller changes (50% of the median or 40% of the average wage), while it reaches 0.4% of GDP in a few cases where minimum wages are increased to 60% of the median wage (in Estonia, Germany, Greece, and the Netherlands) or 50% of the average (in the Netherlands, Poland, and Romania). In turn, the simulations imply a small negative impact on the public budget balance for Hungary and Spain. Negative fiscal effects are driven by lower tax revenues in Hungary and by lower revenues from social security contributions in Spain. Results may be sensitive to modelling assumptions.[291]

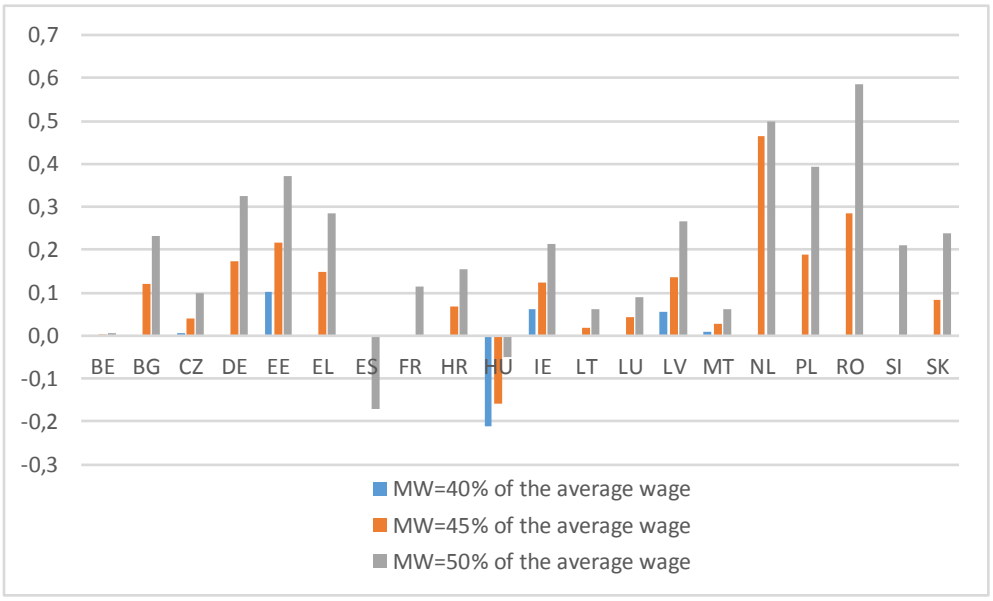
Graph A12.12: Impact of hypothetical minimum wage scenarios on public budgets, change in fiscal balance as % of GDP

(a) Scenarios of minimum wages as a proportion of the median wage



[291] For instance, these simulations find that increases in the minimum wage have a positive effect on the fiscal position in the Netherlands, while Zandvliet et al. (2019; see reference in the previous footnote) find that increased benefits expenditure, linked to the increase in minimum wages, would outweigh positive effects from tax revenue and would result in a negative overall effect on the public budget balance.

(b) Scenarios of minimum wages as a proportion of the average wage



Notes: European Commission (JRC) calculations based on simulations with the Euromod microsimulation model. Positive numbers reflect improvements in the public fiscal balance. Countries sorted alphabetically. Countries with minimum wages above 60% of the median wage were excluded.

A12.9. The choice between possible indicative reference values

A12.9.1. Options

The policy options presented in Section 5.4.2 include a measure providing for indicative reference values of minimum wage adequacy to be used when setting statutory minimum wages. Two of the policy packages presented in Section 5.6 includes this measure. This section explains the options, the impacts and the choice between possible indicative reference values.

Possible indicators to base such reference values on are presented in Annex A11.2. Two indicators have been retained among the options:

1) the gross minimum wage as a percentage of the gross average wage and
2) the gross minimum wage as a percentage of the gross median wage.

Other options, based on the net income of minimum wage earners, are discarded in Section 5.5 for their complexity and the lack of transparency this may result in for the implementation of the initiative.

For both indicators, three options for reference values have been assessed. These are: 40%, 45% and 50% of the gross average wage, and 50%, 55% and 60% of the gross median wage.[292]

A12.9.2. Choice of the indicator

The median wage is a widely used indicator to compare minimum wages across countries. It is a more accurate indicator of the inequality of low wages and is more related to possible effects on employment. This is because, as opposed to the average wage, the median wage is not affected by top incomes. For this reason, it is preferred by some analysts (including the OECD) to the comparison to the average wage.

The average wage is also a widely used indicator to compare minimum wages across countries. It is based on a simpler statistical concept than the median wage. In addition, in four Member States (Czechia, Estonia, Lithuania and Poland), targets have been formulated in terms of the average wage. For some Member States (primarily in Central and Eastern Europe, in particular Bulgaria, Hungary, Portugal and Romania), it provides for more ambitious guidance than the median wage. At the same time, since this more ambitious guidance may be driven by rapid growth of high wages, it may be divorced from developments relevant for low-wage earners.

Based on these arguments, both the median wage and the average wage can be useful in guiding the policies of Member States. The median wage may be more closely related to developments relevant for low-wage earners. At the same time, the average wage is based on a simpler concept which makes it easier to communicate to the public. In addition, some Member States already have adequacy targets based on the average wage.

A12.9.3. Choice of the reference value

Higher reference values are more effective in reaching the goals of the initiative. The highest options (60% of the median wage or 50% of the average wage) have very significant positive social impacts (and are preferred by workers' organisations); the intermediate options (55% of the median wage or 45% of the average wage) have significantly positive social impacts, while the lowest options (50% of the median wage or 40% of the average wage) are not expected to have a very significant positive social impact.

In the quantitative simulations, social benefits are proportional to possible costs in terms of employment and more broadly to the economic costs. This is ensured by the methodology used to simulate employment effects: the employment impact is linked to the increase in the wages of minimum wage beneficiaries by a parameter (called the

[292] Statistical definitions and issues related to the concepts of the average and median wage are discussed in Annex A4.7.

"own-wage elasticity"). More broadly, the social benefits are proportional to the economic costs of higher minimum wages since an increase in beneficiaries' wages means increased labour cost for the firm. This cost may be shared between employers (in the form of reduced profits) and consumers (in the form of higher prices) but this does not loosen the close link between social benefit and economic cost. See Table A12.4 for summary information of some benefits costs, based on simulations presented in more detail in previous sections of this Annex.[293]

[293] Countries and number of workers affected, as well as the increase in the wage bill is based on calculations shown in Annex A12.1. Impacts on wage inequality, in-work poverty, and the gender pay gap are based on calculations shown in Annex A12.2. Employment impacts are based on calculations shown in Annex A12.4. Costs for consumers, firms and SMEs are based on calculations shown in Annex A12.12.

Table A12.4: A summary of costs and benefits associated with various reference values

	Median Wage			Average wage		
	50% of median wage	**55% of median wage**	**60% of median wage**	**40% of average wage**	**45% of average wage**	**50% of average wage**
Countries affected	9 MS: CZ, DE, EE, EL, HR, IE, LV, MT, NL	15 MS: all statutory MS but BG, ES, FR, PT, RO, SI	19 MS: all statutory MS but PT and BG	6 MS: CZ, EE, HU, IE, LV, MT	17 MS: all statutory MS but ES, FR, PT, SI	20 MS: all statutory MS but PT
Number of workers affected	5 million	11 million	22 million	0,7 million	12 million	24 million
Increase in the EU wage bill	0,2%	0,4%	1,0%	0,01%	0,4%	1,0%
Impact on wage inequality	-2%	-5%	-8%	-1%	-6%	-10%
Impact on in-work poverty	-2%	-6%	-12%	-1%	-7%	-13%
Gender pay gap	-0,7%	-2%	-5%	-0,2%	-2%	-5%
Impact on total employment	-0,1%	-0,2%	-0,4%	-0,01%	-0,2%	-0,5%
Annual cost borne by consumers	EUR 8 billion	EUR 17 billion	EUR 40 billion	EUR 0,6 billion	EUR 15 billion	EUR 38 billion
Annual cost borne by firms	EUR 3 billion	EUR 6 billion	EUR 13 billion	EUR 0,2 billion	EUR 5 billion	EUR 13 billion
--Of which: costs borne by SMEs	EUR 2 billion	EUR 5 billion	EUR 12 billion	EUR 0,2 billion	EUR 4 billion	EUR 11 billion

Very high reference values could increase the risks in terms of economic impacts, but other elements in the preferred package mitigate the risks. As it has been pointed out by the academic literature, most evidence related to the impacts of minimum wages has been gained on the basis of moderate levels of minimum wages, i.e., those observed now in the EU. Research remains inconclusive about the threshold up to which the minimum wage can be increased without causing a significant loss in employment. The highest reference values among the options (i.e. 60% of the median wage and 50% of the average wage) are close to the currently highest minimum wages in the EU. Therefore, there could be some risks in terms of employment and economic impacts at these levels, especially for some (low-wage) sub-national regions and sectors. Such risks have been also emphasised by the European Commission in its guidance to Member States in the European Semester. At the same time, the preferred package includes sufficient flexibility to allow Member States to determine the pace of improving the adequacy of minimum wages in light of economic conditions and risks, including to specific sectors, regions and SMEs. This means that higher risks are not necessarily associated with the highest reference values (i.e. 60% of the median wage or 50% of the average wage). However, this can imply some risks to the degree of implementation for the options related to the highest reference values.

In sum, the intermediate and high reference values (55% or 60% of the median wage and 45% or 50% of the average wage) are chosen as possible preferred options. They are very effective in attaining the adequacy goals of the initiative, as opposed to the lower reference values (50% of the median or 40% of the average wage), while they can have high efficiency. The choice between them involves trading off higher expected social benefits against higher economic costs and higher risks both in terms of these costs and in terms of the degree of implementation. The reference values based on the median and the average wage similar guidance to most Member States, but there are differences for individual Member States (see Box 1 in Section 6.1.4 as well as the discussion in this Annex on the choice of the indicator).

Finally, a combination of reference values based on both indicators is also possible, whereby Member States could be asked to take into account either the highest or the lowest of both reference values (60% of the median and 50% of the average wage, if the highest reference values are combined; or 55% of the median and 45% of the average wage if the intermediate reference values are combined). This may imply small differences in guidance for individual Member States, but very small changes in the overall expected impacts as shown in the overview table above.

A12.10. Capacity building actions

Capacity building is a key tool for supporting collective bargaining. Measures promoted in this regard aim at providing financial, legal, analytical, institutional and political support in view of ensuring that social partners are effectively engaged in collective bargaining on wage setting. Such measures include, inter alia, providing financial and organisational resources, promoting knowledge-building through mutual learning, identification and exchanges of good practices and providing qualified training and counselling. Capacity building also depends on the will and efforts of the social partners themselves who are best placed to identify their needs. These efforts can be supported by public authorities, also by making use of public funding, while respecting the social partners' autonomy.

Capacity building initiatives for more effective social dialogue help social partners to improve their membership basis and their human and administrative capacities; to promote their process-oriented capacities; and to support their organisational development. Typical promoting capacity-building initiatives contribute to strengthening organisation-oriented capacities of social partners (e.g. membership, human resources and administrative capacities) and their process-oriented capacities. The lists below provide more information in this regard.[294]

Organisation-oriented capacities (e.g. membership, human resources and administrative capacities):

- Set up, maintain or expand a stable membership
- Inform, organise and protect current and potential members
- Provide qualified training and counselling, information and communication for their members, partners, management and administrative staff
- Provide and diversify services for members
- Obtain or maintain appropriate equipment
- Adapt organisational structures and work practices according to changing labour markets, globalisation and their impact on industrial relations

Process-oriented capacities:

- Set up structures for social dialogue
- Effectively engage in collective bargaining, social dialogue and dispute resolution

[294] Eurofound (2019), "Exploring how to support capacity-building for effective social dialogue".

- (Co)regulate the employment relationship
- Mobilise members for industrial action.
- Participate in policymaking at different levels
- Participate in international cooperation and interregional/cross-border activities
- Engage in advocacy

A12.11. Coherence

The options considered in this Impact Assessment are coherent with the European Semester and with the Country Specific Recommendations issued within its framework. This section presents a summary of the European Semester processes, the EU framework for the coordination of economic policies across the European Union as well as detail of the CSRs issued to Member States during the last years.

a) <u>European Semester</u>

Wage policies (including those related to minimum wages) are subject to multilateral surveillance within the European Semester, the annual cycle of economic policy coordination in the EU. Specifically, at the beginning of each Semester cycle, wage developments are analysed in the frame of the Annual Sustainable Growth Strategy (ASGS), the Alert Mechanism Report (AMR) and – more in detail – in the Joint Employment Report (JER) and the Labour Market and Wage Development Report (LMWD). The recommendation for the euro area (EAR) also includes policy advice linked to wage developments. Next, EU governments present to the Commission their National Reform Programmes, and as from 2020, their Resilience and Recovery Plans, which detail the specific policies and reforms each country will implement to boost jobs and growth, the green and digital transitions, and prevent/correct imbalances, as well as their concrete plans to comply with the EU's country-specific recommendations and general fiscal rules. Later in the cycle, the Country Reports analyse wage (and minimum wage) developments in all Member States and also present an assessment of the implementation of the Country-specific recommendations (CSRs) as well as of the Resilience and Recovery Plans. Subsequently, in 2021 the Commission will present each country with implementing decisions regarding the RRF [and in subsequent years also CSRs]. During the last years, a number of CSRs have been issued to Member States in the area of wages, and also more specifically on minimum wages (see section b) below).

Minimum wages will also continue to be monitored through the European Commission's benchmarking frameworks. These frameworks, which are developed in close cooperation with the Member States, are analytical frameworks which support structural reforms, promote the exchange of best practice and foster multilateral surveillance. In September 2019, the European Commission presented to Member States a draft discussion paper on benchmarking minimum wages.[295] This benchmarking framework proposes indicators to monitor outcomes, policy performance and policy levers related to minimum wage policies. It does not establish quantitative thresholds for good performance or reference values. Discussions in the Employment Committee remained in an early stage.

[295] This work stream follows up on the Commission Communication on "Establishing a European Pillar of Social Rights", from April 2017, which indicated that benchmarking and the exchange of best practice would be conducted for a number of policies in the employment and social area, including minimum wages.

b) Brief overview of Country Specific Recommendation (CSRs) issued to Member States

CSRs on minimum wages (since 2011)

Ten Member States have received CSRs related to minimum wages in the last decade. While the situation has not improved overall, the recommendations on minimum wages has decreased as the number of CSRs was drastically reduced in recent years and their focus shifted to addressing the macroeconomic imbalances and investment shortfall resulting from shortfalls in the aftermath of the 2008-2012 economic and financial crisis.

- **Bulgaria and Romania**: The CSRs addressed to these countries in 2014-19 have consistently emphasised the need for more transparent minimum wage setting mechanisms based on objective criteria for determining annual minima (such as job creation and competitiveness), as well as guidelines for minimum wage updating. However, no sufficient action has been very limited progress over years and challenges persist.

- **Belgium** (2011-14), **Luxembourg** (2011-14), **Malta** (2011-12), **and Slovenia** (2014) received CSRs calling for a reform in the wage indexation systems, in consultation with social partners and along national practice, to better reflect productivity developments or take into account competitiveness concerns. Moreover, **Cyprus** also received a CSR to reform its system of wage indexation (2011-12), consulting social partners and following national practices, to better follow productivity trends.

- **France** has received CSRs (2012-13, 2015-18) emphasising the need for minimum wage setting to be supportive of job creation and competitiveness.

- **Germany and Portugal** received CSRs directly focused on the statutory minimum wage, regarding its legal introduction in the former (2014) and its updating according to employment and competitiveness in the latter case (2014-17).

CSRs on wages (since 2011)

Five Member States have received CSRs related to overall wage growth. These recommendations focused on addressing imbalances within the euro area and improving the competitiveness of Member States economies, rather than on adequacy aspects.

- **Germany** has been recommended to support real wage growth more broadly in the CSRs of 2017-19 with a view to strengthening domestic demand and contributing to euro-area rebalancing.

- **The Netherlands** was recommended to differentiate wage growth (2014) and to support wage growth (2017-19), respecting social partners' role, to strengthen domestic demand and help to rebalance the euro area.

- **Spain** was recommended in 2011 to continue reforming collective bargaining and wage indexation, in line with social partners and national practices.

- **Croatia** was recommended (2015-19) to reform its wage setting framework across the public administration and public services, in consultation with the social partners.

- **Spain and France** (in 2014-15 and 2013, respectively) have received CSRs calling for real wage developments in line with job creation and productivity developments.

A12.12. Costs for firms and SMEs

Social benefits in terms of higher wages mean increased labour costs for firms. Table A12.5 summarises the estimated increase in the wage bill as simulated with the Euromod model for various scenarios in which Member States with statutory minimum wages comply with various non-binding reference values as a ratio of the median or average wage (see country-specific estimations in Annex A12.1). At the highest reference values, the overall increase in the wage bill is about 1% at the EU level, which translates to about EUR 51-53 billion of total economic cost for consumers and firms. The increase of the wage bill is about 0.4% at intermediate reference values (translating into about EUR 20-22 billion of economic cost), while the lower reference values imply smaller increases. Ultimately, most of this cost is borne by consumers in terms of higher prices, while a smaller share is borne by firms in terms of reduced profits. According to the estimation of a pioneering academic study, consumers bear about 75% of the cost.[296]

Table A12.5: Summary of wage increase and implied costs for firms in scenarios of compliance with various indicative reference values

	MW = 40% avg. wage	MW = 45% avg. wage	MW = 50% avg. wage	MW = 50% median wage	MW = 55% median wage	MW = 60% median wage
Increase in the wage bill, EU, %	0,01	0,4	1,0	0,2	0,4	1,0
-- Same, expressed in billion EUR	0,7	19	51	11	23	53
-- Costs for firms, bn EUR	0,2	5	13	3	6	13
-- Costs for consumers, bn EUR	0,6	15	38	8	17	40

Note: Calculations based on Euromod simulations conducted by the European Commission, Joint Research Centre.

[296] This figure is based on the estimation of Harasztosi, P. and A. Lindner (2019): "Who pays for the minimum wage?" American Economic Review, Vol. 109(8): 2693–2727. Since most of these consumers are not minimum wage earners, the minimum wage has a clear redistributive effect.

This total cost for firms can be apportioned by categories of firm size based on the share of minimum wage earners by firm size. This is done in Table A12.6. The share of minimum wage earners by Member State and firm size is estimated from EU-SILC, as shown in Annex A7.2.[297]

Two thirds of the costs of increased minimum wages fall on micro and small enterprises, divided almost equally. This corresponds to the share of these categories of firms in the employment of minimum wage earners. As a comparison, micro and small enterprises have a share in total employment of about 50% in the EU.[298] The remaining third of the costs falls on medium and large enterprises, with about 60% of this third borne by medium-sized ones (see Table A12.6 and Graph A12.12).

Table A12.6: Breakdown of annual costs for firms by firm size, scenarios of compliance with various indicative reference values, billion EUR

	MW = 40% of average wage	MW = 45% of average wage	MW = 50% of average wage	MW = 50% of median wage	MW = 55% of median wage	MW = 60% of median wage
Costs borne by firms	0,2	4,8	12,8	2,8	5,7	13,4
Costs borne by SMEs (less than 250 employees)	0,2	4,2	11,2	2,4	4,9	11,6
Costs borne by small companies (less than 50 employees)	0,1	3,2	8,8	1,8	3,7	9,0
Costs borne by firms with more than 250 employees	0,0	0,6	1,6	0,4	0,8	1,7
Costs borne by firms with 50-250 employees	0,0	1,0	2,4	0,6	1,2	2,6
Costs borne by firms with 10-49 employees	0,1	1,7	4,4	0,8	1,8	4,4
Costs borne by firms with less than 10 employees	0,1	1,5	4,3	0,9	1,9	4,6

Note: Calculations based on Euromod simulations conducted by the European Commission, Joint Research Centre.

[297] While EU-SILC does not allow a differentiation between medium enterprises (between 50 and 250 employees) and large ones (more than 250 employees), information from the EU-SES was used to calculate this breakdown. For Member States for which this ratio was not observed in EU-SES, the EU average ratio of minimum wage earners between medium and large enterprises was used to calculate this breakdown.

[298] Eurostat, structural business statistics, URL : https://ec.europa.eu/eurostat/statistics-explained/index.php/Structural_business_statistics_overview.

A12.13. The SME Test – Summary of results

(1) Preliminary assessment of businesses likely to be affected	
Measures of the preferred package apply to all Member States and to all firms who employ workers at the minimum wage. There are some differences across countries based on the system of minimum wage setting. In countries where minimum wage protection is provided by collective agreements, firms are bound by collective agreements setting such minima. In these countries, firms are affected by strengthened collective bargaining and enforcement of wages set in collective agreements. In countries with a statutory national minimum wage, all firms are bound by this. While SMEs employ about two-thirds of all workers, they employ almost 90% of minimum wage earners. Of this, micro and small enterprises employ about two-thirds of minimum wage earners, as compared to about one-half of all workers, but there is a variety of patterns across the EU.[299] Micro enterprises (firms with less than 10 employees) employ a majority of minimum wage earners in Greece (73%) and Slovakia (51%) and more than 40% in Croatia, Portugal and Spain. In contrast, their weight is only about 20% in Bulgaria, Lithuania and Romania. In small enterprises (10-49 employees), the share of minimum wage earners ranges from 63% in Bulgaria and 52% in Latvia to about 20% in Slovenia and Greece.	See Section 2.1.3 on the profile of minimum wage earners as well as Annex A7.2, and especially Graph A7.8 on the distribution of minimum wage workers by firm size.
(2) Consultation with SMEs' representatives	
Social partners, including representatives of SMEs, were consulted during the two-stage social-partner consultation. In particular, SMEUnited pointed out that minimum wages can help prevent unfair competition and social dumping on the labour market, which is a key concern for SMEs. However, they expressed the belief that there was an added value for an EU action but this should be of a non-binding nature[300].	See Annex 2 for the summary of responses received in the two-stage social partner consultation.

[299] On the distribution of minimum wage earners by firm size, see Annex A7.2, and in particular Graph A7.8.

[300] In their reply to the second stage consultation SMEUnited stated that "A well-adapted minimum wage level contributes to strengthen internal demand and economic growth. It also reduces poverty and social exclusion as well as prevents unfair competition and social dumping on the labour market, a key concern for SMEs." A the same time they also stated that "Since Art 153 (5) of the TFEU explicitly states that pay is not a competence of the European Union, the setting of appropriate minimum wages, taking into account national economic and social conditions, lacks in our view the legal basis. Therefore issuing a directive on "statutory minimum-wage setting guided by national frameworks based on clear and stable criteria with reasonably frequent and regular updates" is not the right way forward. Instead the European action should concentrate on promoting social dialogue and supporting social partners to engage in collective bargaining, be it at national or sectoral level […] A possible instrument could be the involvement of the social partners in wage determination, within the framework of the European Semester". SMEUnited (2020): Response to first phase consultation of social partners under Art 154 TFEU on a possible action addressing the challenges related to fair minimum wages. See Annex 2 for a summary of consultations.

In terms of policy options, SMEUnited considered that the reference to the median wage or average wage for fixing the adequate level of minimum wage is not the most suited reply to balance a fair level of income for workers and the conditions for business competitiveness. SMEUnited stated that the involvement of social partners in minimum wage setting should be ensured all over Europe, also to ensure more transparent and predictable minimum wage setting and improve the business environment.[301]	
(3) Measurement of the impact on SMEs	
Many small firms are active in sectors that are sensitive to domestic demand, which may reverse possible negative effects of minimum wage policies on them for two reasons: First, they are likely to be able to pass on increased labour costs to consumers by increasing prices. Second, increased minimum wages may also increase demand for their services. This is suggested by the academic literature on restaurants, which suggests that, in most cases, enterprises in this sector may benefit from minimum wage increases.[302] Whether minimum wages have a more negative impact on SMEs than on larger firms depends on the broader economic context, including their sectoral specialisation. SMEs are expected to face higher wage costs as a result of higher minimum wages. Costs for SMEs are proportional to their share in the employment of minimum-wage earners. The preferred package implies, under full compliance with the non-binding reference value of minimum wage adequacy, additional annual costs for SMEs in the EU of about EUR 12 billion (reference value of 60% of the median wage) or EUR 5 billion (reference value of 55% of the median wage). On the other hand, firms (SMEs included) are expected to profit from more stable and transparent minimum wage setting mechanisms based on objective criteria and guidelines for minimum wage updating. This will help SMEs to anticipate developments in the minimum wage and mitigate any negative impacts.	See Section 6.2.2 and 6.2.4 on the expected economic impacts of various packages on SMEs, as well as section 7.2 on the distribution of minimum wage workers by firm size.

[301] They provide input to the Commission ahead of the adoption of the Annual Sustainable Growth Strategy (ASGS), and participate in the ensuing discussions. They also provide input to the Commission's analysis of economic and social developments in each Member State, which feeds into both the Country Reports and the Country-Specific Recommendations.

[302] See, e.g. Card, David and Alan B. Krueger. 1994. "Minimum Wages and Employment: A Case Study of the New Jersey and Pennsylvania Fast Food Industries," American Economic Review, 84(4): 772-793; Dube, Arindrajit, Suresh Naidu, and Michael Reich. 2007. "The economic effects of a citywide minimum wage," ILR Review, 60(4): 522-543; Hirsch, Barry T, Bruce E Kaufman, and Tetyana Zelenska. 2015. "Minimum wage channels of adjustment," Industrial Relations: A Journal of Economy and Society, 54(2): 199-239; Katz, Lawrence F and Alan B. Krueger. 1992. "The effect of the minimum wage on the fast-food industry," ILR Review, 46(1): 6-21.

A12.14. Implication of the packages on Member States

(a) Member States where minimum wage protection is provided by collective agreements

	Collective bargaining			National frameworks for setting/updating minimum wages			Social Partner Involvement			Variations, deductions and exemptions			Enforcement		
MS	Package A	Package B	Package C	Package A	Package B	Package C	Package A	Package B	Package C	Package A	Package B	Package C	Package A	Package B	Package C
AT	Capacity building for social partners and encouraging negotiations on wages.	Capacity building for social partners and encouraging negotiations on wages.	Capacity building for social partners and encouraging negotiations on wages.	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	Strengthen enforcement of wage clauses in collective agreements. Ensue compliance in public procurement with wages set by collective agreements. Enhance monitoring and data collection mechanism for wages set in collectie agreements.	Same as Package A	Same as Package A
CY	Capacity building for social partners and encouraging negotiations on wages. Extensions of collective agreements, when agreed with social partners.	Capacity building for social partners and encouraging negotiations on wages. Collective bargaining coverage ratebelow 70%: provide for a regulatory framework or enabling conditions and establish an action plan to promote collective bargaining.	Capacity building for social partners and encouraging negotiations on wages.	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	Strengthen enforcement of wage clauses in collective agreements. Ensue compliance in public procurement with wages set by collective agreements. Enhance monitoring and data collection mechanism for wages set in collectie agreements.	Same as Package A	Same as Package A
DK	Capacity building for social partners and encouraging negotiations on wages. Extensions of collective agreements, when agreed with social partners.	Capacity building for social partners and encouraging negotiations on wages.	Capacity building for social partners and encouraging negotiations on wages.	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	Strengthen enforcement of wage clauses in collective agreements. Ensue compliance in public procurement with wages set by collective agreements. Enhance monitoring and data collection mechanism for wages set in collectie agreements.	Same as Package A	Same as Package A
FI	Capacity building for social partners and encouraging negotiations on wages. Ensure universal extensions of collective agreements, when agreed with social partners.	Capacity building for social partners and encouraging negotiations on wages.	Capacity building for social partners and encouraging negotiations on wages.	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	Strengthen enforcement of wage clauses in collective agreements. Ensue compliance in public procurement with wages set by collective agreements. Enhance monitoring and data collection mechanism for wages set in collectie agreements.	Same as Package A	Same as Package A
IT	Capacity building for social partners and encouraging negotiations on wages. Extensions of collective agreements, when agreed with social partners.	Capacity building for social partners and encouraging negotiations on wages.	Capacity building for social partners and encouraging negotiations on wages.	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	Strengthen enforcement of wage clauses in collective agreements. Ensue compliance in public procurement with wages set by collective agreements. Enhance monitoring and data collection mechanism for wages set in collectie agreements.	Same as Package A	Same as Package A
SE	Capacity building for social partners and encouraging negotiations on wages. Extensions of collective agreements, when agreed with social partners.	Capacity building for social partners and encouraging negotiations on wages.	Capacity building for social partners and encouraging negotiations on wages.	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	*Not applicable*	Strengthen enforcement of wage clauses in collective agreements. Ensue compliance in public procurement with wages set by collective agreements. Enhance monitoring and data collection mechanism for wages set in collectie agreements.	Same as Package A	Same as Package A

(b) Member States with national statutory minimum wages

- **Collective Bargaining**

MS	Collective bargaining		
	Package A	Package B	Package C
BE	Capacity building for social partners and encouraging negotiations on wages. Extensions of collective agreements, when agreed with social partners.	Capacity building for social partners and encouraging negotiations on wages.	Capacity building for social partners and encouraging negotiations on wages.
BG	Capacity building for social partners and encouraging negotiations on wages. Extensions of collective agreements, when agreed with social partners.	Capacity building for social partners and encouraging negotiations on wages. As collective bargaining coverage rate is below 70%, provide for a regulatory framework or enabling conditions and establish an action plan to promote collective bargaining.	Capacity building for social partners and encouraging negotiations on wages.
CZ	Capacity building for social partners and encouraging negotiations on wages. Extensions of collective agreements, when agreed with social partners.	Capacity building for social partners and encouraging negotiations on wages. As collective bargaining coverage rate is below 70%, provide for a regulatory framework or enabling conditions and establish an action plan to promote collective bargaining.	Capacity building for social partners and encouraging negotiations on wages.
DE	Capacity building for social partners and encouraging negotiations on wages. Extensions of collective agreements, when agreed with social partners.	Capacity building for social partners and encouraging negotiations on wages. As collective bargaining coverage rate is below 70%, provide for a regulatory framework or enabling conditions and establish an action plan to promote collective bargaining.	Capacity building for social partners and encouraging negotiations on wages.
EE	Capacity building for social partners and encouraging negotiations on wages. Extensions of collective agreements, when agreed with social partners.	Capacity building for social partners and encouraging negotiations on wages. As collective bargaining coverage rate is below 70%, provide for a regulatory framework or enabling conditions and establish an action plan to promote collective bargaining.	Capacity building for social partners and encouraging negotiations on wages.
IE	Capacity building for social partners and encouraging negotiations on wages. Extensions of collective agreements, when agreed with social partners.	Capacity building for social partners and encouraging negotiations on wages. As collective bargaining coverage rate is below 70%, provide for a regulatory framework or enabling conditions and establish an action plan to promote collective bargaining.	Capacity building for social partners and encouraging negotiations on wages.

MS	Collective bargaining		
	Package A	Package B	Package C
IE	Capacity building for social partners and encouraging negotiations on wages. Extensions of collective agreements, when agreed with social partners.	Capacity building for social partners and encouraging negotiations on wages. As collective bargaining coverage rate is below 70%, provide for a regulatory framework or enabling conditions and establish an action plan to promote collective bargaining.	Capacity building for social partners and encouraging negotiations on wages.
EL	Capacity building for social partners and encouraging negotiations on wages. Extensions of collective agreements, when agreed with social partners.	Capacity building for social partners and encouraging negotiations on wages. As collective bargaining coverage rate is below 70%, provide for a regulatory framework or enabling conditions and establish an action plan to promote collective bargaining.	Capacity building for social partners and encouraging negotiations on wages.
ES	Capacity building for social partners and encouraging negotiations on wages. Extensions of collective agreements, when agreed with social partners.	Capacity building for social partners and encouraging negotiations on wages. As collective bargaining coverage rate is below 70%, provide for a regulatory framework or enabling conditions and establish an action plan to promote collective bargaining.	Capacity building for social partners and encouraging negotiations on wages.
FR	Capacity building for social partners and encouraging negotiations on wages. Extensions of collective agreements, when agreed with social partners.	Capacity building for social partners and encouraging negotiations on wages.	Capacity building for social partners and encouraging negotiations on wages.
HR	Capacity building for social partners and encouraging negotiations on wages. Extensions of collective agreements, when agreed with social partners.	Capacity building for social partners and encouraging negotiations on wages. As collective bargaining coverage rate is below 70%, provide for a regulatory framework or enabling conditions and establish an action plan to promote collective bargaining.	Capacity building for social partners and encouraging negotiations on wages.
LV	Capacity building for social partners and encouraging negotiations on wages. Extensions of collective agreements, when agreed with social partners.	Capacity building for social partners and encouraging negotiations on wages. As collective bargaining coverage rate is below 70%, provide for a regulatory framework or enabling conditions and establish an action plan to promote collective bargaining.	Capacity building for social partners and encouraging negotiations on wages.
LT	Capacity building for social partners and encouraging negotiations on wages. Extensions of collective agreements, when agreed with social partners.	Capacity building for social partners and encouraging negotiations on wages. As collective bargaining coverage rate is below 70%, provide for a regulatory framework or enabling conditions and establish an action plan to promote collective bargaining.	Capacity building for social partners and encouraging negotiations on wages.

MS	Collective bargaining		
	Package A	Package B	Package C
LU	Capacity building for social partners and encouraging negotiations on wages. Extensions of collective agreements, when agreed with social partners.	Capacity building for social partners and encouraging negotiations on wages. As collective bargaining coverage rate is below 70%, provide for a regulatory framework or enabling conditions and establish an action plan to promote collective bargaining.	Capacity building for social partners and encouraging negotiations on wages.
HU	Capacity building for social partners and encouraging negotiations on wages. Extensions of collective agreements, when agreed with social partners.	Capacity building for social partners and encouraging negotiations on wages. As collective bargaining coverage rate is below 70%, provide for a regulatory framework or enabling conditions and establish an action plan to promote collective bargaining.	Capacity building for social partners and encouraging negotiations on wages.
MT	Capacity building for social partners and encouraging negotiations on wages. Extensions of collective agreements, when agreed with social partners.	Capacity building for social partners and encouraging negotiations on wages. As collective bargaining coverage rate is below 70%, provide for a regulatory framework or enabling conditions and establish an action plan to promote collective bargaining.	Capacity building for social partners and encouraging negotiations on wages.
NL	Capacity building for social partners and encouraging negotiations on wages. Extensions of collective agreements, when agreed with social partners.	Capacity building for social partners and encouraging negotiations on wages.	Capacity building for social partners and encouraging negotiations on wages.
PL	Capacity building for social partners and encouraging negotiations on wages. Extensions of collective agreements, when agreed with social partners.	Capacity building for social partners and encouraging negotiations on wages. As collective bargaining coverage rate is below 70%, provide for a regulatory framework or enabling conditions and establish an action plan to promote collective bargaining.	Capacity building for social partners and encouraging negotiations on wages.
PT	Capacity building for social partners and encouraging negotiations on wages. Extensions of collective agreements, when agreed with social partners.	Capacity building for social partners and encouraging negotiations on wages.	Capacity building for social partners and encouraging negotiations on wages.
RO	Capacity building for social partners and encouraging negotiations on wages. Extensions of collective agreements, when agreed with social partners.	Capacity building for social partners and encouraging negotiations on wages. As collective bargaining coverage rate is below 70%, provide for a regulatory framework or enabling conditions and establish an action plan to promote collective bargaining.	Capacity building for social partners and encouraging negotiations on wages.
SI	Capacity building for social partners and encouraging negotiations on wages. Extensions of collective agreements, when agreed with social partners.	Capacity building for social partners and encouraging negotiations on wages.	Capacity building for social partners and encouraging negotiations on wages.
SK	Capacity building for social partners and encouraging negotiations on wages. Extensions of collective agreements, when agreed with social partners.	Capacity building for social partners and encouraging negotiations on wages. As collective bargaining coverage rate is below 70%, provide for a regulatory framework or enabling conditions and establish an action plan to promote collective bargaining.	Capacity building for social partners and encouraging negotiations on wages.

- **National frameworks for setting/updating minimum wages**

MS	National frameworks for setting/updating minimum wages (criteria, adequacy and frequency of updates)		
	Package A	Package B	Package C
BE	Ensure that statutory minimum wages follow a national measure of decent living standards (reference income), developed in consultation with social partners.	Revise the current list of binding criteria used to guide statutory minimum wage setting and updating, defined in the national legislation, so that they include (potentially in addition to the current list) the list under measure 2.1 and ensure that these are used in a stable and clear way. Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.	Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages
BG	Ensure that statutory minimum wages follow a national measure of decent living standards (reference income), developed in consultation with social partners.	Define in the national legislation clear, stable and binding criteria to guide statutory minimum wage setting and updating, which should be in line with the list under measure 2.1. Define in the national legislation provisions for regular and timely minimum wage updates. Establish or appoint a consultative body to advise the competent authorities on issues related to statutory minimum wages. Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.	Establish in national legislation a system of automatic indexation. Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.
CZ	Ensure that statutory minimum wages follow a national measure of decent living standards (reference income), developed in consultation with social partners.	Revise the current list of binding criteria used to guide statutory minimum wage setting and updating, defined in the national legislation, so that they include (potentially in addition to the current list) the list under measure 2.1 and ensure that these are used in a stable and clear way. Define in the national legislation provisions for regular and timely minimum wage updates.	Establish in national legislation a system of automatic indexation.
DE	Ensure that statutory minimum wages follow a national measure of decent living standards (reference income), developed in consultation with social partners.	Revise the current list of binding criteria used to guide statutory minimum wage setting and updating, defined in the national legislation, so that they include (potentially in addition to the current list) the list under measure 2.1 and ensure that these are used in a stable and clear way. Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.	Establish in national legislation a system of automatic indexation Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.
EE	Ensure that statutory minimum wages follow a national measure of decent living standards (reference income), developed in consultation with social partners.	Define in the national legislation clear, stable and binding criteria to guide statutory minimum wage setting and updating, which should be in line with the list under measure 2.1. Define in the national legislation provisions for regular and timely minimum wage updates.	Establish in national legislation a system of automatic indexation.
IE	Ensure that statutory minimum wages follow a national measure of decent living standards (reference income), developed in consultation with social partners.	Revise the current list of binding criteria used to guide statutory minimum wage setting and updating, defined in the national legislation, so that they include (potentially in addition to the current list) the list under measure 2.1 and ensure that these are used in a stable and clear way. Define in the national legislation provisions for regular and timely minimum wage updates. Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.	Establish in national legislation a system of automatic indexation. Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.

MS	National frameworks for setting/updating minimum wages (criteria, adequacy and frequency of updates)		
	Package A	Package B	Package C
EL	Ensure that statutory minimum wages follow a national measure of decent living standards (reference income), developed in consultation with social partners.	Revise the current list of binding criteria used to guide statutory minimum wage setting and updating, defined in the national legislation, so that they include (potentially in addition to the current list) the list under measure 2.1 and ensure that these are used in a stable and clear way. Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.	Establish in national legislation a system of automatic indexation Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.
ES	Ensure that statutory minimum wages follow a national measure of decent living standards (reference income), developed in consultation with social partners.	Revise the current list of binding criteria used to guide statutory minimum wage setting and updating, defined in the national legislation, so that they include (potentially in addition to the current list) the list under measure 2.1 and ensure that these are used in a stable and clear way. Establish or appoint a consultative body to advise the competent authorities on issues related to statutory minimum wages. Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.	Establish in national legislation a system of automatic indexation Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.
FR	Ensure that statutory minimum wages follow a national measure of decent living standards (reference income), developed in consultation with social partners.	Revise the current list of binding criteria used to guide statutory minimum wage setting and updating, defined in the national legislation, so that they include (potentially in addition to the current list) the list under measure 2.1 and ensure that these are used in a stable and clear way. Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.	Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.
HR	Ensure that statutory minimum wages follow a national measure of decent living standards (reference income), developed in consultation with social partners.	Revise the current list of binding criteria used to guide statutory minimum wage setting and updating, defined in the national legislation, so that they include (potentially in addition to the current list) the list under measure 2.1 and ensure that these are used in a stable and clear way. Establish or appoint a consultative body to advise the competent authorities on issues related to statutory minimum wages. Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.	Establish in national legislation a system of automatic indexation. Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.
LV	Ensure that statutory minimum wages follow a national measure of decent living standards (reference income), developed in consultation with social partners.	Revise the current list of binding criteria used to guide statutory minimum wage setting and updating, defined in the national legislation, so that they include (potentially in addition to the current list) the list under measure 2.1 and ensure that these are used in a stable and clear way. Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.	Establish in national legislation a system of automatic indexation. Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.
LT	Ensure that statutory minimum wages follow a national measure of decent living standards (reference income), developed in consultation with social partners.	Revise the current list of binding criteria used to guide statutory minimum wage setting and updating, defined in the national legislation, so that they include (potentially in addition to the current list) the list under measure 2.1 and ensure that these are used in a stable and clear way.	Establish in national legislation a system of automatic indexation
LU	Ensure that statutory minimum wages follow a national measure of decent living standards (reference income), developed in consultation with social partners.	Revise the current list of binding criteria used to guide statutory minimum wage setting and updating, defined in the national legislation, so that they include (potentially in addition to the current list) the list under measure 2.1 and ensure that these are used in a stable and clear way. Establish or appoint a consultative body to advise the competent authorities on issues related to statutory minimum wages. Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.	Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.

MS	National frameworks for setting/updating minimum wages (criteria, adequacy and frequency of updates)		
	Package A	Package B	Package C
HU	Ensure that statutory minimum wages follow a national measure of decent living standards (reference income), developed in consultation with social partners.	Revise the current list of binding criteria used to guide statutory minimum wage setting and updating, defined in the national legislation, so that they include (potentially in addition to the current list) the list under measure 2.1 and ensure that these are used in a stable and clear way. Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.	Establish in national legislation a system of automatic indexation Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.
MT	Ensure that statutory minimum wages follow a national measure of decent living standards (reference income), developed in consultation with social partners.	Revise the current list of binding criteria used to guide statutory minimum wage setting and updating, defined in the national legislation, so that they include (potentially in addition to the current list) the list under measure 2.1 and ensure that these are used in a stable and clear way. Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.	Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.
NL	Ensure that statutory minimum wages follow a national measure of decent living standards (reference income), developed in consultation with social partners.	Revise the current list of binding criteria used to guide statutory minimum wage setting and updating, defined in the national legislation, so that they include (potentially in addition to the current list) the list under measure 2.1 and ensure that these are used in a stable and clear way. Establish or appoint a consultative body to advise the competent authorities on issues related to statutory minimum wages. Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.	Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.
PL	Ensure that statutory minimum wages follow a national measure of decent living standards (reference income), developed in consultation with social partners.	Revise the current list of binding criteria used to guide statutory minimum wage setting and updating, defined in the national legislation, so that they include (potentially in addition to the current list) the list under measure 2.1 and ensure that these are used in a stable and clear way.	Establish in national legislation a system of automatic indexation
PT	Ensure that statutory minimum wages follow a national measure of decent living standards (reference income), developed in consultation with social partners.	Revise the current list of binding criteria used to guide statutory minimum wage setting and updating, defined in the national legislation, so that they include (potentially in addition to the current list) the list under measure 2.1 and ensure that these are used in a stable and clear way. Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.	Establish in national legislation a system of automatic indexation Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.
RO	Ensure that statutory minimum wages follow a national measure of decent living standards (reference income), developed in consultation with social partners.	Define in the national legislation clear, stable and binding criteria to guide statutory minimum wage setting and updating, which should be in line with the list under measure 2.1. Define in the national legislation provisions for regular and timely minimum wage updates. Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.	Establish in national legislation a system of automatic indexation. Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.
SI	Ensure that statutory minimum wages follow a national measure of decent living standards (reference income), developed in consultation with social partners.	Revise the current list of binding criteria used to guide statutory minimum wage setting and updating, defined in the national legislation, so that they include (potentially in addition to the current list) the list under measure 2.1 and ensure that these are used in a stable and clear way. Establish or appoint a consultative body to advise the competent authorities on issues related to statutory minimum wages. Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.	Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.
SK	Ensure that statutory minimum wages follow a national measure of decent living standards (reference income), developed in consultation with social partners.	Revise the current list of binding criteria used to guide statutory minimum wage setting and updating, defined in the national legislation, so that they include (potentially in addition to the current list) the list under measure 2.1 and ensure that these are used in a stable and clear way. Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.	Establish in national legislation a system of automatic indexation Use indicators and reference values to guide the assessment of the adequacy of statutory minimum wages.

- **Social Partners involvement, Variations, deductions and exemptions**

MS	Social Partner Involvement			Variations, Deductions and exemptions		
	Package A	Package B	Package C	Package A	Package B	Package C
BE				Ban variations, deductions and exemptions from statutory minimum wages	Ensure that the variations in and deductions from statutory minimum wages are non-discriminatory, proportionate, limited in time, if relevant, and objectively and reasonably justified by a legitimate aim.	*No implications*
BG	Establish or appoint a bipartite/tripartite body with decision-making power on minimum wages issues.	Ensure the timely and effective involvement of social partners in minimum wage setting and updating that guarantees that the views of social partners are taken into account.	Same as Package B	Ban deductions from statutory minimum wages	Ensure that deductions from statutory minimum wages are non-discriminatory, proportionate, limited in time, if relevant, and objectively and reasonably justified by a legitimate aim.	*No implications*
CZ	Formalise by law the tripartite consultation process and ensure that the tripartite body is equipped with decision-making power.	Formalise by law the tripartite consultation process and ensure the timely and effective involvement of social partners in minimum wage setting and updating.	Same as Package B	Ban exemptions and deductions from statutory minimum wages	Ensure that deductions from statutory minimum wages are non-discriminatory, proportionate, limited in time, if relevant, and objectively and reasonably justified by a legitimate aim.	*No implications*
DE	Ensure that a tripartite body is in place with decision-making power on minimum wages issues.			Ban exemptions and deductions from statutory minimum wages	Ensure that deductions from statutory minimum wages are non-discriminatory, proportionate, limited in time, if relevant, and objectively and reasonably justified by a legitimate aim.	*No implications*
EE				Ban exemptions and deductions from statutory minimum wages	Ensure that deductions from statutory minimum wages are non-discriminatory, proportionate, limited in time, if relevant, and objectively and reasonably justified by a legitimate aim.	*No implications*
IE	Establish or appoint a bipartite/tripartite body with decision-making power on minimum wages issues.	Ensure the timely and effective involvement of social partners in minimum wage setting and updating that guarantees that the views of social partners are taken into account. Ensure that social partners participate in the consultative body which advise national authorities on statutory minimum wages.	Same as Package B	Ban variations, deductions and exemptions from statutory minimum wages	Ensure that the variations in and deductions from statutory minimum wages are non-discriminatory, proportionate, limited in time, if relevant, and objectively and reasonably justified by a legitimate aim.	*No implications*
EL	Establish or appoint a bipartite/tripartite body with decision-making power on minimum wages issues.	Ensure the timely and effective involvement of social partners in minimum wage setting and updating that guarantees that the views of social partners are taken into account. Ensure that social partners participate in the consultative body which advise national authorities on statutory minimum wages	Same as Package B	Ban variations and deduction from statutory minimum wages	Ensure that the variations in and deductions from statutory minimum wages are non-discriminatory, proportionate, limited in time, if relevant, and objectively and reasonably justified by a legitimate aim.	*No implications*

MS	Social Partner Involvement			Variations and exemptions		
	Package A	Package B	Package C	Package A	Package B	Package C
ES	Establish or appoint a bipartite/tripartite body with decision-making power on minimum wages issues.	Ensure the timely and effective involvement of social partners in minimum wage setting and updating that guarantees that the views of social partners are taken into account. Ensure that social partners participate in the consultative body which advise national authorities on statutory minimum wages	Same as Package B	Ban variations, deductions and exemptions from statutory minimum wages	Ensure that the variations in and deductions from statutory minimum wages are non-discriminatory, proportionate, limited in time, if relevant, and objectively and reasonably justified by a legitimate aim.	*No implications*
FR	Establish or appoint a bipartite/tripartite body with decision-making power on minimum wages issues.	Ensure the timely and effective involvement of social partners in minimum wage setting and updating that guarantees that the views of social partners are taken into account. Ensure that social partners participate in the consultative body which advise national authorities on statutory minimum wages.	Same as Package B	Ban variations, deductions and exemptions from statutory minimum wages	Ensure that the variations in and deductions from statutory minimum wages are non-discriminatory, proportionate, limited in time, if relevant, and objectively and reasonably justified by a legitimate aim.	*No implications*
HR	Establish or appoint a bipartite/tripartite body with decision-making power on minimum wages issues.	Ensure the timely and effective involvement of social partners in minimum wage setting and updating that guarantees that the views of social partners are taken into account. Ensure that social partners participate in the consultative body which advise national authorities on statutory minimum wages.	Same as Package B	Ban variations, deductions and exemptions from statutory minimum wages	Ensure that the variations in and deductions from statutory minimum wages are non-discriminatory, proportionate, limited in time, if relevant, and objectively and reasonably justified by a legitimate aim.	*No implications*
LV	Ensure that the tripartite body has decision-making power on minimum wages issues.	Ensure the timely and effective involvement of social partners in minimum wage setting and updating that guarantees that the views of social partners are taken into account.	Same as Package B	Ban exemptions and deductions from statutory minimum wages	Ensure that deductions from statutory minimum wages are non-discriminatory, proportionate, limited in time, if relevant, and objectively and reasonably justified by a legitimate aim.	*No implications*
LT	Ensure that the tripartite body has decision-making power on minimum wages issues.			Ban exemptions and deductions from statutory minimum wages	Ensure that deductions from statutory minimum wages are non-discriminatory, proportionate, limited in time, if relevant, and objectively and reasonably justified by a legitimate aim.	*No implications*
LU	Establish or appoint a bipartite/tripartite body with decision-making power on minimum wages issues.	Ensure the timely and effective involvement of social partners in minimum wage setting and updating that guarantees that the views of social partners are taken into account. Ensure that social partners participate in the consultative body which advise national authorities on statutory minimum wages.	Same as Package B	Ban variations and deductions from statutory minimum wages	Ensure that the variations in and deductions from statutory minimum wages are non-discriminatory, proportionate, limited in time, if relevant, and objectively and reasonably justified by a legitimate aim.	*No implications*

MS	Social Partner Involvement			Variations and exemptions		
	Package A	Package B	Package C	Package A	Package B	Package C
HU	Establish or appoint a bipartite/tripartite body with decision-making power on minimum wages issues.	Ensure the timely and effective involvement of social partners in minimum wage setting and updating that guarantees that the views of social partners are taken into account.	Same as Package B	Ban variations and deductions from statutory minimum wages	Ensure that the variations in and deductions from statutory minimum wages are non-discriminatory, proportionate, limited in time, if relevant, and objectively and reasonably justified by a legitimate aim.	*No implications*
MT	Ensure that the tripartite body has decision-making power on minimum wages issues.	Ensure the timely and effective involvement of social partners in minimum wage setting and updating that guarantees that the views of social partners are taken into account.	Same as Package B	Ban variations and deductions from statutory minimum wages	Ensure that the variations in and deductions from statutory minimum wages are non-discriminatory, proportionate, limited in time, if relevant, and objectively and reasonably justified by a legitimate aim.	*No implications*
NL	Establish or appoint a bipartite/tripartite body with decision-making power on minimum wages issues. .	Ensure the timely and effective involvement of social partners in minimum wage setting and updating that guarantees that the views of social partners are taken into account. Ensure that social partners participate in the consultative body which advise national authorities on statutory minimum wages.	Same as Package B	Ban variations, deductions and exemptions from statutory minimum wages	Ensure that the variations in and deductions from statutory minimum wages are non-discriminatory, proportionate, limited in time, if relevant, and objectively and reasonably justified by a legitimate aim.	*No implications*
PL	Ensure that the tripartite body has decision-making power on minimum wages issues.			Ban exemptions and deductions from statutory minimum wages	Ensure that deductions from statutory minimum wages are non-discriminatory, proportionate, limited in time, if relevant, and objectively and reasonably justified by a legitimate aim.	*No implications*
PT	Ensure that the tripartite body has decision-making power on minimum wages issues.	Ensure the timely and effective involvement of social partners in minimum wage setting and updating that guarantees that the views of social partners are taken into account.	Same as Package B	Ban variations and deductions from statutory minimum wages	Ensure that the variations in and deductions from statutory minimum wages are non-discriminatory, proportionate, limited in time, if relevant, and objectively and reasonably justified by a legitimate aim.	*No implications*
RO	Ensure that the tripartite body has decision-making power on minimum wages issues.	Ensure the timely and effective involvement of social partners in minimum wage setting and updating that guarantees that the views of social partners are taken into account.	Same as Package B	Ban deductions from statutory minimum wages	Ensure that deductions from statutory minimum wages are non-discriminatory, proportionate, limited in time, if relevant, and objectively and reasonably justified by a legitimate aim.	*No implications*
SI	Establish or appoint a bipartite/tripartite body with decision-making power on minimum wages issues.	Ensure the timely and effective involvement of social partners in minimum wage setting and updating that guarantees that the views of social partners are taken into account. Ensure that social partners participate in the consultative body which advise national authorities on statutory minimum wages.	Same as Package B	Ban deductions from statutory minimum wages	Ensure that deductions from statutory minimum wages are non-discriminatory, proportionate, limited in time, if relevant, and objectively and reasonably justified by a legitimate aim.	*No implications*
SK	Ensure that the tripartite body has decision-making power on minimum wages issues.			Ban deductions from statutory minimum wages	Ensure that deductions from statutory minimum wages are non-discriminatory, proportionate, limited in time, if relevant, and objectively and reasonably justified by a legitimate aim.	*No implications*

- **Enforcement**

Enforcement			
MS	Package A	Package B	Package C
BE	Strengthening the enforcement of statutory minimum wages and wage clauses in collective agreements. Ensure compliance with minimum wages in public procurement. Enhancing monitoring and data collection mechanism on statutory minimum wages and of wages set in collective agreements.	Same as Package A	Same as Package A
BG	Strengthening the enforcement of statutory minimum wages and wage clauses in collective agreements. Ensure compliance with minimum wages in public procurement. Enhancing monitoring and data collection mechanism on statutory minimum wages and of wages set in collective agreements.	Same as Package A	Same as Package A
CZ	Strengthening the enforcement of statutory minimum wages and wage clauses in collective agreements. Ensure compliance with minimum wages in public procurement. Enhancing monitoring and data collection mechanism on statutory minimum wages and of wages set in collective agreements.	Same as Package A	Same as Package A
DE	Strengthening the enforcement of statutory minimum wages and wage clauses in collective agreements. Ensure compliance with minimum wages in public procurement. Enhancing monitoring and data collection mechanism on statutory minimum wages and of wages set in collective agreements.	Same as Package A	Same as Package A
EE	Strengthening the enforcement of statutory minimum wages and wage clauses in collective agreements. Ensure compliance with minimum wages in public procurement. Enhancing monitoring and data collection mechanism on statutory minimum wages and of wages set in collective agreements.	Same as Package A	Same as Package A
IE	Strengthening the enforcement of statutory minimum wages and wage clauses in collective agreements. Ensure compliance with minimum wages in public procurement. Enhancing monitoring and data collection mechanism on statutory minimum wages and of wages set in collective agreements.	Same as Package A	Same as Package A
EL	Strengthening the enforcement of statutory minimum wages and wage clauses in collective agreements. Ensure compliance with minimum wages in public procurement. Enhancing monitoring and data collection mechanism on statutory minimum wages and of wages set in collective agreements.	Same as Package A	Same as Package A

Enforcement			
MS	Package A	Package B	Package C
ES	Strengthening the enforcement of statutory minimum wages and wage clauses in collective agreements. Ensure compliance with minimum wages in public procurement. Enhancing monitoring and data collection mechanism on statutory minimum wages and of wages set in collective agreements.	Same as Package A	Same as Package A
FR	Strengthening the enforcement of statutory minimum wages and wage clauses in collective agreements. Ensure compliance with minimum wages in public procurement. Enhancing monitoring and data collection mechanism on statutory minimum wages and of wages set in collective agreements.	Same as Package A	Same as Package A
HR	Strengthening the enforcement of statutory minimum wages and wage clauses in collective agreements. Ensure compliance with minimum wages in public procurement. Enhancing monitoring and data collection mechanism on statutory minimum wages and of wages set in collective agreements.	Same as Package A	Same as Package A
LV	Strengthening the enforcement of statutory minimum wages and wage clauses in collective agreements. Ensure compliance with minimum wages in public procurement. Enhancing monitoring and data collection mechanism on statutory minimum wages and of wages set in collective agreements.	Same as Package A	Same as Package A
LT	Strengthening the enforcement of statutory minimum wages and wage clauses in collective agreements. Ensure compliance with minimum wages in public procurement. Enhancing monitoring and data collection mechanism on statutory minimum wages and of wages set in collective agreements.	Same as Package A	Same as Package A
LU	Strengthening the enforcement of statutory minimum wages and wage clauses in collective agreements. Ensure compliance with minimum wages in public procurement. Enhancing monitoring and data collection mechanism on statutory minimum wages and of wages set in collective agreements.	Same as Package A	Same as Package A
HU	Strengthening the enforcement of statutory minimum wages and wage clauses in collective agreements. Ensure compliance with minimum wages in public procurement. Enhancing monitoring and data collection mechanism on statutory minimum wages and of wages set in collective agreements.	Same as Package A	Same as Package A

Enforcement			
MS	Package A	Package B	Package C
ES	Strengthening the enforcement of statutory minimum wages and wage clauses in collective agreements. Ensure compliance with minimum wages in public procurement. Enhancing monitoring and data collection mechanism on statutory minimum wages and of wages set in collective agreements.	Same as Package A	Same as Package A
FR	Strengthening the enforcement of statutory minimum wages and wage clauses in collective agreements. Ensure compliance with minimum wages in public procurement. Enhancing monitoring and data collection mechanism on statutory minimum wages and of wages set in collective agreements.	Same as Package A	Same as Package A
HR	Strengthening the enforcement of statutory minimum wages and wage clauses in collective agreements. Ensure compliance with minimum wages in public procurement. Enhancing monitoring and data collection mechanism on statutory minimum wages and of wages set in collective agreements.	Same as Package A	Same as Package A
LV	Strengthening the enforcement of statutory minimum wages and wage clauses in collective agreements. Ensure compliance with minimum wages in public procurement. Enhancing monitoring and data collection mechanism on statutory minimum wages and of wages set in collective agreements.	Same as Package A	Same as Package A
LT	Strengthening the enforcement of statutory minimum wages and wage clauses in collective agreements. Ensure compliance with minimum wages in public procurement. Enhancing monitoring and data collection mechanism on statutory minimum wages and of wages set in collective agreements.	Same as Package A	Same as Package A
LU	Strengthening the enforcement of statutory minimum wages and wage clauses in collective agreements. Ensure compliance with minimum wages in public procurement. Enhancing monitoring and data collection mechanism on statutory minimum wages and of wages set in collective agreements.	Same as Package A	Same as Package A
HU	Strengthening the enforcement of statutory minimum wages and wage clauses in collective agreements. Ensure compliance with minimum wages in public procurement. Enhancing monitoring and data collection mechanism on statutory minimum wages and of wages set in collective agreements.	Same as Package A	Same as Package A

Annex 13 Monitoring and Evaluation

Table A13.1: Proposed indicators for monitoring the implementation of the initiative

(a) for statutory minimum wages

Monitoring areas	Core indicators	Source
Minimum wage levels	Level of statutory minimum wages, gross monthly figures	Eurostat data (earn_mw_cur), Eurofound
Workers covered by minimum wages	Share of workers covered by statutory minimum wages	Eurostat (EU-SES), or national data
	The existing variations and the share of workers covered by them	National data
	The existing deductions	National data
Collective bargaining coverage	The rate of collective bargaining coverage	OECD/National data

(b) for minimum wage protection provided by collective agreements

Monitoring areas	Core indicators	Source
Minimum wage levels	The distribution in deciles of such wages weighted by the share of covered workers	National data
Collective bargaining coverage	The rate of collective bargaining coverage	OECD/National data
Adequacy and coverage	The level and adequacy of wages for workers not having minimum wage protection provided by collective agreements	National data

These statistics and information would be disaggregated by gender, age group, and sector.