



Industrial relations and social dialogue  
**Collective bargaining in a climate of  
high inflation: The role of indexation  
mechanisms**

[Tackling rising inflation in  
collective wage bargaining](#)

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## Contents

<b>Introduction</b> .....	<b>1</b>
<b>The context for collective bargaining in inflationary times: social dialogue and industrial conflict</b> ...	<b>3</b>
Industrial conflict.....	3
Social dialogue and incomes policies .....	3
<b>Collective bargaining, inflation and indexation</b> .....	<b>5</b>
Automatic indexation .....	5
Formal role for inflation in wage-setting.....	6
Collective bargaining and minimum wages in the context of inflation .....	6
<b>Sustaining real wages: formulas used and groups affected</b> .....	<b>8</b>
Compensating for losses in purchasing power: flat rate payments and bonuses .....	8
Real wage dynamics: differences across sectors and groups of workers, higher increases for lower wage groups.....	9
<b>Conclusion</b> .....	<b>10</b>
<b>References</b> .....	<b>11</b>

# Introduction

EU economies have been facing since 2021 growing inflation as a consequence of the strain on value chains caused by the pandemic crisis and the increase in energy and food prices following the war in Ukraine. In most countries, this constitutes a major shift in the environment for negotiating wages, as low inflation has been the norm since the late 1990s. This inflationary context creates pressures for collective bargaining actors to adapt and respond to its double impact on wages. First, inflation leads to a decline in the purchasing power of wages and thus private consumption. Secondly, it affects to a larger extent those workers and households with lower incomes, since they have to dedicate a proportionately larger part of their wages to pay for energy bills, food etc (ILO 2022).

Cross-country differences in inflation rates constitute a first element to explain the differential impact on real wages. These differences may arise because of different degrees of dependence on imported gas or the capacity to replace fossil fuels with renewable energy sources. However, the translation into losses in purchasing power of wages as well as its distributional impact depends crucially on the institutional context for setting wages (collective bargaining coverage and structure, among others) and those policies implemented by governments that may reduce the need to set higher wages (Cantero and Aumayr-Pintar, 2023). See related articles:

- [Measures to lessen the impact of the inflation and energy crisis on citizens](#)
- [First responses to cushion the impact of inflation on citizens](#)
- [Policies to support EU companies affected by the war in Ukraine](#)

In order to analyse the role of collective bargaining in the cost-of-living crisis, two aspects need to be brought into consideration. First, the current inflation crisis hasn't been driven by expansionary wage-setting or rigidities in collective bargaining institutions (ILO 2022). Indeed, real wages have experienced in many countries sustained losses over the last fifteen years or at best, limited increases. Secondly, collective bargaining in many countries has been decentralised, coverage rates declined and many studies have showed a limited role for indexation mechanisms in collective agreements (de Spiegalaere 2023, Koester and Grapow 2021). As a consequence, negotiated wage increases over the last two years have in most countries remained far below price increases (Lübker and Janssen 2022). We can thus expect that in 2023 collective bargaining and social dialogue could play a key role in helping to mitigate the negative impacts of the cost-of-living crisis on workers and help to achieve inclusive responses to protect low paid groups, whilst avoiding wage-price spirals.

This Working Paper explores how has collective bargaining adapted to the new inflationary scenario in the EU-27. It relies on information provided by the Network of Eurofound Correspondents. The analysis pays particular attention to those mechanisms shaping wage-setting practices and negotiated wages and the differences across groups of workers and sectors. The working paper shows growing tensions in collective bargaining as a consequence of inflation, but a limited increase in conflict levels during 2022. Moreover, there are few experiences of peak-level incomes policies agreements providing coordinated responses to the cost-of-living crisis, though prevailing mechanisms of bipartite coordination have remained key in in some countries. The analysis also confirms a limited role for indexation mechanisms, that contrasts with many countries where inflation has a formal role in setting negotiated wages. Finally, the analysis suggests a stronger recovery of purchasing power through negotiated wages for lower wage groups and low pay sectors.

The paper first provides the background for the negotiation of wages, looking at conflict levels and the role played by social dialogue in coordinating responses by social partners. Second, it analyses indexation mechanisms linking wages to inflation or other cost of living indicators. The section also analyses the interaction between negotiated wages and the minimum wage. Finally, the working paper analyses differences in wage increases across groups of workers and sectors.

# The context for collective bargaining in inflationary times: social dialogue and industrial conflict

## Industrial conflict

The decline in real wages triggered by the rise in cost of living is likely to create tensions in negotiations of collective agreements, especially from 2023 onwards. However, the analysis of collective bargaining developments in EU-27 countries shows that these tensions haven't translated so far into a generalised increase in industrial conflict and strikes across EU countries. In general, social partners have approached the renewal of agreements with caution due to the uncertainties surrounding the persistence of inflation and its impact on the economy, and this has also contributed to reduce conflict levels. Only in a limited number of countries an increase in strikes and conflict has been reported. This is the case of **Austria**, where more industrial action has happened in a country with usually very low levels of strikes. Also in **Greece**, where the trade union GSEE called for strikes in April and November 2022, especially in the public sector. In **Portugal** too, public sector trade unions have organised a wave of strikes in the last quarter of 2022 around wage increases that included doctors, teachers, transport workers, among others. A similar situation happened in **Slovenia**, where strikes were particularly intense in the public sector. More conflict in the public sector could be explained as a consequence of the accumulated losses in purchasing power of public sector workers since the 2008 financial crisis and austerity policies. In **Finland**, disagreements between employers and trade unions and have led to failure to sign an agreement in the local public sector, where the negotiation round of spring 2022 was marked by non-agreement between the Local Government and County Employers KT (Kuntatyöntajat) and health care professionals unions, resulting in industrial action.

## Social dialogue and incomes policies

Social dialogue can play an important role in providing a favourable context for coordinating and manage the responses to the inflation crisis. A first mechanisms to achieve this goal are so called incomes policies agreements, whereby social partners and the government define some policies and goals to control inflation. These agreements often involve a coordination of negotiated wages to facilitate wage moderation (Busemeyer et al. 2022), but may also include specific goals regarding the distributional impact of inflation, like limits on benefits or policies targeted to the low-wage groups.

Among all EU-27, only **Portugal** has signed a tripartite agreement. The Medium-Term Agreement for Improving Income, Wages and Competitiveness, for the period 2023-2026, includes guidelines on wage policy. The main purpose of the tripartite agreement is to increase the wage share of GDP by, at least, three percentage points, reaching 48.3% by 2026, to converge with the EU average. The agreement includes incentives to employers, namely the increase of 50% to the employer's tax deductions in return for salary increases for companies complying with at least one of the following conditions: have a dynamic collective bargaining (signed or renewed collective agreements less than three years before); annually increase wages in line with goals foreseen in the tripartite agreement; and have reduced the difference between the 10% higher paid jobs and the 10% lower paid ones. In **Spain**, after several months of negotiations, social partners signed in May 2023 the fifth peak cross-sectoral agreement for collective bargaining and employment. The agreement provides guidelines

for negotiating collective agreements and is considered an important mechanism to coordinate collective bargaining. The pact establishes a path for wage increases over the next three years, consisting of a 4% increase in 2023, 3% in 2024 and 3% in 2025. In case the actual inflation exceeds 4% in 2023, 3% in 2024 and 2025, an extra 1% increase will be provided.

Those countries with strong mechanisms for bipartite coordination of collective bargaining have relied on these in order to provide coordinated responses. In **Sweden** social partners usually negotiate on a three-year basis, but because the uncertainty brought by the inflation crisis, they settled on a one-year contract. In **Belgium** negotiations for an interprofessional agreement (IPA) started in November 2022 in order to provide a coordinated framework for collective bargaining responses to the inflation crisis.

# Collective bargaining, inflation and indexation

The use of indexation clauses in collective bargaining, including cost of living adjustment mechanisms (COLAs), is back at the centre of the discussion as a consequence of the inflation crisis. These mechanisms serve to automatically adjust real wages in case of higher-than-expected inflation, helping to provide real wage rigidity and nominal wage flexibility (De Spiegelaere 2023). Even though these mechanisms were widespread until the mid 1990s, the low inflation context led to abandon them in most countries. Before the Great Depression, indexation mechanisms were still present in collective bargaining in six countries (Belgium, Spain, Cyprus, Luxembourg, Malta and Slovenia) (CEB 2008). Later studies have showed that only Belgium, Cyprus and Luxembourg have maintained automatic indexation mechanisms (Eurofound 2018).

The analysis confirms the limited extension of automatic indexation in collective agreements in the EU-27, but shows a diversity of mechanisms whereby wages have adjusted to the inflationary context. Relying on the four wage indexation regimes identified by Koester and Grapow (2021), the following sections focus on three of them: automatic wage indexation, formal role of inflation in wage-setting, and the role of minimum wages. Their impact, in terms of ability of wages to keep up with inflation developments, varies significantly.

## Automatic indexation

Automatic indexation occurs when there are clauses in collective agreements that establish an automatic linkage to price developments. Automatic indexation of negotiated wages has become increasingly rare in the European context. Some countries explicitly prohibit automatic indexation mechanism but still consider inflation in wage increases (**France, Germany**). In other countries, indexation clauses gradually disappeared from collective agreements. During the run-up to EMU, countries aiming to join the Euro Area undertook reforms of their wage-setting systems and removed or reduced the role of indexation. This was particularly the case of Southern European countries, with Italy removing the Scala Mobile in 1992 and Spain reducing the extension of revision clauses gradually. Eastern European countries followed a similar path over the last two decades due to the low inflation rate.

However, the analysis confirms the persistence of automatic indexation in some countries (BE and LU, with functional equivalent in MT). In **Luxembourg** there is a wage indexation mechanism that ensures regular wage increases. More specifically, wages are automatically increased if the consumer price index increases by at least 2.5% in the previous 6 months. In **Malta** indexation takes place through the COLA allowance. This mechanism is based on the inflation rate that determines the annual mandatory allowance given to all employees, but that represents a small part of the total wage and does not greatly affect people on higher wages. In **Belgium** too, there is an automatic indexation system established in a 1996 law that obliged social partners to negotiate salary increases over a two-year period within the bounds of an upper limit set by anticipated hourly wage developments in key export markets (France, Germany, the Netherlands) and a floor determined by expected inflation in Belgium (Geis 2022). Moreover, there is an additional adjustment mechanism whereby allowing additional wage increases if actual inflation exceeds forecasted one and wage growth in neighbouring economies. This explains why the government has introduced no additional measures to accommodate for increases in prices of essential products.



## Formal role for inflation in wage-setting

In a second group of countries, inflation plays an important role in wage-setting, but there is no automatic recovery of purchasing power of wages through linking it to inflation. The way in which this happens, varies significantly across countries. In some cases, inflation has already a role in the bargaining rounds, through wage guidelines. In **Austria** the so-called Benya-formula foresees a compensation for inflation plus a share of the productivity gains of the previous year. Usually, the wage increases thus compensate for inflation and a certain top-up. A similar mechanism, the so-called distribution-neutral margin is used in some sectors in **Germany**. These mechanisms don't provide for automatic recovery, nor even imply a formal role for inflation, but shape the outcome of wage-setting. In **Slovenia**, many collective agreements refer to inflation as a factor for adjusting salaries, though only some of them contain a fixed ex-ante indexation of wages. While inflation is merely one of the indicators in some cases, the value or adjustment ratio of wages to inflation is explicitly defined in others.

Collective agreements in other countries include mechanisms to recover purchasing power ex-post. This is the case of **Spain**, where around 45% of workers with collective agreement signed for 2023 have wage revision clauses that will allow to increase wages in case of real inflation exceeding the forecasted one, but the number of workers with wage review clauses has been increasing during 2022. Similarly, in the case of **France** several sectors have started to take the precaution of including a review clause (*clause de revoyure*) in their agreements to trigger new negotiations in line with inflation. Adjustment is not automatic and can only be made through negotiation. Similar mechanisms have also been observed in the case of the public sector in **Ireland**. Negotiations for a new public service agreement known as the 'Building Momentum' agreement took place in late 2020 and covered the years 2021 and 2022. The agreement featured a review clause that was triggered in early 2022 due to the rising cost of living. While a successor agreement would have been taken place in 2022 regardless, inflation was a predominant factor in the build up to, and during negotiations between the public services committee of the Congress of trade unions (ICTU) and the Department of Public Expenditure and Reform.

## Collective bargaining and minimum wages in the context of inflation

In a third group of countries, there is no automatic indexation nor direct or formal role of inflation in wage-setting. However, inflation still plays a role in negotiated wages indirectly, through the impact of the statutory minimum wage that very often incorporates cost of living indicators. The interaction between minimum and negotiated wages depends on several factors, including the mechanism whereby the minimum wage is updated, or the responsiveness of collective agreements to changes in the minimum wage. Moreover, the impact of the minimum wage tends to be limited to the lower wage groups in collective agreements, which are more likely to fall below when the minimum wage increases. From this point of view, it has a positive distributional impact by compressing the wage distribution, this compression has a lot of implications in professional career, hiring, attractiveness, etc.

In the case of France, inflation plays an important role, as the indexation of the statutory minimum wage to inflation results in successive increases. As a result of the three increases in the SMIC in 2022, the minimum wages set in the sectoral collective agreements were often exceeded, as the social partners concerned were unable to renegotiate pay scales at the same pace. A similar case is

Luxembourg, where negotiated wage increases in the private sector are updated following minimum wage developments. In Spain employers didn't support the increase in the statutory MW approved by the government in 2023 in agreement with trade unions and complained that these increases reduced the scope for collective bargaining and thus the autonomy of social partners. In Estonia, trade unions supported higher increases in the minimum wage before the slow adaptation of collective bargaining to the inflationary scenario. In Slovenia, collective agreements usually determine their values at levels lower than the statutory minimum wage, so the employer must pay those workers the difference up to the minimum wage. Their pay rise thus relies on the indexation of the statutory minimum wage, not on changes in sectoral agreements.

## Sustaining real wages: formulas used and groups affected

The mechanisms used by social partners to increase real wages and sustain their purchasing power have exhibited remarkable differences in two dimensions. First, in relation to the way in which wage increases have been defined in collective agreements. Secondly, regarding the groups affected by the increases and their distributional impact.

### Compensating for losses in purchasing power: flat rate payments and bonuses

Several mechanisms have been implemented in order to compensate for the loss of purchasing power of wages. All these have in common a one-off increase in disposable income. However, the way in which this has been implemented has taken many forms.

In most of the countries analysed, a preference for the use of flat rate payments to compensate workers for the losses in purchasing power can be appreciated. The use of these mechanisms has some advantages over traditional wage increases. First, unlike wage increases, flat rate payments have no lasting effects on wages, don't reproduce inflationary pressures and reduce the potential for second round effects. Second, they have a positive distributional impact, since they're proportionally more favourable to the interests of lower wage groups. Finally, they're more flexible and don't require the adaptation of existing wage-setting mechanisms and formulas. However, in an inflationary context they also present some drawbacks, including the lack of consolidation of wage increases and the difficulty for affected workers to exactly know the effective increase in wages. Moreover, the use of these mechanisms can be more onerous for small companies, especially when the amount is high. From the worker's perspective the disadvantage is that if prices continue to be high or increase further flat rate payments would have to be renegotiated again.

The use of flat rate payments has been particularly widespread in **Germany**, where inflation compensation payments have topped up wage increases in collective agreements. As part of the relief package adopted by the German government to mitigate high inflation rates, companies were allowed to pay a tax-free inflation allowance ("Inflationsgeld") in two instalments of 1,500 EUR in 2023 and 2024. In **Austria**, employers initially offered flat-rate payments, but the strong opposition from trade unions led to rely on standard wage increases. In **Denmark**, where these mechanisms have never been used, social partners have started to discuss the possibility to pay lump sums as a kind of inflation patch. In **Finland** too, the manufacturing sector social partners have also agreed on wage increases below inflation complemented with lump sum payments. **Sweden** has also combined wage increases with flat rate payments. Other countries where these mechanisms have been used include **Croatia, Italy, Lithuania or Poland**. In **Luxembourg** and **Portugal** flat rate payments have been used for public sector workers.

In other countries, higher disposable income for employees has taken other forms. In **Ireland**, one feature used to manage inflationary pressures on pay was with the expansion of the small benefit exemption scheme, whereby employers could provide to employees a tax free voucher of up to €1,000 per annum (the previous annual limit was €500). This was sought by trade unions. In the **Netherlands**, employers have used different ways to compensate employees, including ad hoc

bonuses, tax scheme related to buy bikes, extra allowance to finance investments. In **France**, there are negotiations within companies on the sharing of value (*partage de la valeur*) in order to generalise and strengthen the benefits of value-sharing and financial participation schemes. The aim is to allow companies' profits to be shared more fairly with employees.

## Real wage dynamics: differences across sectors and groups of workers, higher increases for lower wage groups

In most EU-27 countries, negotiated wage increases during 2021 and 2022 have remained below inflation levels. This has translated into real wage losses for large groups of workers. The distributional impact of inflation, that affects disproportionately lower wage groups, has led social partners in some of the countries studied to implement wage policies aimed at favouring these groups. First, by increasing statutory minimum wages. Secondly, by setting higher increases for lower wage groups in the collective agreement. This is the case of **Austria**, where there was a tendency towards staggered wage increases, i.e., higher increases in the lower wage groups and lower increases in higher wage groups.

Across sectors, there is some evidence pointing towards higher wage growth in sectors characterised by generally low wages. In **Portugal** wholesale retail reported high wage increases compared to other sectors, including the public sector. In **Italy**, the domestic service sector collective agreements set wage increases well above inflation and higher than many other sectors. At the same time, the public sector has in several countries registered lower wage increases compared to the national average. This has been the case of **Belgium, Czech Republic, Hungary or Portugal**. By contrast, in **Spain**, trade unions and the government signed a collective agreement that spread a 9,8% wage increase over the next three years.

## Conclusion

After two years from the stress test brought by the pandemic crisis on collective bargaining, inflation is posing new challenges for social partners. Real wage losses provoked by rising inflation have placed pressures for governments to cushion the impact of inflation, but also social partners to set higher wage settlements in a context of growing economic uncertainty and deceleration. Some works have already highlighted the difficulties of collective bargaining to keep up with inflation (de Speigelaere, 2023). The limited role of indexation mechanisms explains part of the sluggish response from negotiated wages.

The adaptation of collective bargaining systems in EU-27 countries to the new inflationary scenario exhibits a remarkable diversity of practices but also some commonalities. The adaptation hasn't so far delivered major disruptions in collective bargaining practices and institutions. Tensions around wage-setting have emerged in some countries and sectors, but there was no widespread increase in industrial conflict during 2022.

Social partners have relied on ad hoc mechanisms to cope with the inflation crisis. The limited extension of indexation mechanisms, together with the preference for the use of flat rate mechanisms, suggests a low risk for wage-price spirals in the short and medium term. However, since forecasts suggest the persistence of high inflation over 2023, the question arises as to the ability of wage-setting practices to guarantee purchasing power of wages. Balancing the goals of ensuring recovery of purchasing power especially for low paid groups whilst minimising risks of second-round effects could provide support for the introduction of temporary targeted mechanisms ensuring a stronger adaptation of wages for low-paid groups or activities.

## References

All Eurofound publications are available at [www.eurofound.europa.eu](http://www.eurofound.europa.eu)

Cantero Guerrero, M., & Aumayr-Pintar, C. (2023). Measures to lessen the impact of the inflation and energy crisis on citizens, EF22081.

De Spiegelaere, S. (2023) All rise. Automatic wage increases in collective agreements in Europe, UNI Europa Snapshot Report 2023-01

ECB (2008) Wage indexation mechanisms in euro area countries, Monthly Bulletin May, ECB.

Eurofound (2018), Salary-setting mechanisms across the EU, Publications Office of the European Union, Luxembourg.

ILO (2022) Global Wage Report 2022-23, ILO

Koester, G. and Grapow, H. (2021) The prevalence of private sector wage indexation in the euro area and its potential role for the impact of inflation on wages. Economic Bulletin Boxes, 7.

Lübker, M., and Janssen, T. (2022). WSI European Collective Bargaining Report 2021/2022: Collective bargaining in times of crisis, war, and inflation (No. 77e). WSI Report.

Müller, T. (2023). Minimum Wage Developments in 2022: Fighting the Cost-Of-Living Crisis. ETUI Research Paper-Policy Brief, 2.

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