

## Collective bargaining as a tool for real wage increases

### Abstract

Over the past three years, the cumulative Consumer Price Index in Bulgaria has reached nearly 35%, while inflation in the small consumer basket rose even more. Low and middle-income earners spend an ever-increasing proportion of their income on essential goods, which have risen significantly in price. Against this background, the trade unions in Bulgaria, through collective bargaining and negotiations at national level, have taken a number of actions. These have led to accelerated income growth that has largely offset the increase in the cost of living and prevented a loss of real purchasing power in the medium term. In Bulgaria, the presence of a collective agreement guarantees that the wage is at least 14% higher than in a situation in which there is none. The past inflationary crisis provides solid empirical information about the role of trade unions in the conditions of the imperfect commodity and labour markets in which the national economy is situated. Taking manufacturing as a focus, the author concludes that the number of challenges the industry has cannot be faced without an enhanced role for human capital.

**Keywords:** *collective bargaining, wages, minimum wage, manufacturing industry, inflation, Bulgaria*

### Introduction

The theory and practice of industrial relations has long proved that trade unions have always been a mainstay of the labour market in any national economy, as well as an important corrective. They are a key tool for supporting the sharing of the benefits of higher productivity between employers and workers. Unions were very successful during all three previous industrial revolutions because they formed a bond between their members: they ensured collective and friendly relations among people and made them have a sense of belonging to something bigger. They nurtured cooperation along common economic interests focused on better working conditions and higher wages. Ultimately, the organised trade union movement was able to cultivate political goals consistent with the beliefs and interests of its members.

We are now in the midst of the fourth industrial revolution – or ‘Industry 4.0’. The role of trade unions not only in Bulgaria but also in the whole of Europe must grow from its current base. Today, workplaces have become less concentrated and more diverse, so it is more difficult to create collective spirit among workers. Moreover, the economic interests of workers themselves have begun to diverge, even often being placed in a competitive environment. This creates a number of

challenges for organised labour. Against this background, a sharp rise in key interest rates due to high inflation has its own risks, as it puts the European economy on a path to probable stagnation or a period of low economic growth. Moreover, the dynamics of the modern global economy are so rapid that a period in the doldrums, even a relatively short one in historical terms, can lead to a loss of competitive advantage across the entire EU.

Perhaps the most important feature of the current industrial revolution, which was absent in previous ones, is the reduction in the labour share of added value (Acemoglu and Johnson 2023). This means that, once new technologies are implemented, the share of added value going to capital is increasing, with the share going to labour decreasing. There is therefore nothing surprising in the search by the European Commission over several years for greater solidarity and more sustainable economic growth (Garben 2019). The European Semester and the integration into it of the European Pillar of Social Rights are specific developments that have happened in this direction.

First of all, this article provides a brief overview of the state of Bulgarian industry in the context of wage levels, the creation of added value and the inflation rate in the last few years. Secondly, empirical data on the benefits of membership of a trade union and the signing of a collective agreement, specifically for Bulgaria, are presented. Finally, the article focuses on the problems faced by unions in Bulgaria in the process of expanding the scope of collective bargaining.

### What is happening to industry in Bulgaria?

The processes of de-industrialisation are developing headlong, creating conditions for a large-scale collapse of industry not only in Bulgaria but also among a number of European countries. There are historical challenges related to the reduction in demand and the serious drop in industrial investment which threaten productive economic entities, as well as the employment and income of the population as a whole.

The trends that have appeared in the last four years in Bulgarian industry, influenced both by negative external economic factors, the Covid-19 crisis and the unstable domestic political environment, are particularly worrying.

A total of 104,557 jobs have been lost to the country's economy, nearly half of them in manufacturing industry (51,219) which means a drop of more than 10% in employment in the sector (see Table 1). This negative effect is relatively weaker in the mining industry, but most strongly affected on a national scale are the construction, real estate operations, and the hospitality and restaurant sectors (each of which see a relative drop in employment above 10%). On the opposite pole, employment jumped strongly in two sectors – the creation and dissemination of information and creative products, and telecommunications (17.7%); and human health and social work (18.8%). The activities most affected by downsizing are those where, traditionally, union representation is less and collective agreement coverage low.

Table 1 – Employees in the Bulgarian economy in 2019 and 2023

<b>Economic sector</b>	<b>2019</b>	<b>2023</b>	<b>Nominal change</b>	<b>Change in %</b>
Agriculture, forestry and fisheries	69,726	65,426	-4,300	-6.2
Mining industry	19,137	18,689	-448	-2.3
Manufacturing industry	505,119	453,900	-51,219	-10.1
Production and distribution of electrical and thermal energy and gaseous fuels	29,834	28,727	-1,107	-3.7
Water supply; sewerage services, waste management and remediation	36,955	36,047	-908	-2.5
Construction	135,264	119,467	-15,797	-11.7
Commerce; car repair and motorcycles	379,575	371,936	-7,639	-2.0
Transport, warehousing and mail	149,934	136,719	-13,215	-8.8
Hospitality and restaurant industry	122,458	94,171	-28,287	-23.1
Creation and distribution of information and creative products; telecommunications	102,249	120,356	+18,107	+17.7
Financial and insurance activities	56,872	52,793	-4,079	-7.2
Real estate transactions	23,971	20,489	-3,482	-14.5
Professional activities and research	82,840	80,384	-2,456	-3.0
Administrative and assistant activities	116,941	107,528	-9,413	-8.0
State administration	112,322	112,437	+115	+0.1
Education	162,757	164,445	+1,688	+1.0
Human health and social work	140,448	166,850	+26,402	+18.8
Culture, sports and entertainment	36,989	34,731	-2,258	-6.1
Other activities	39,170	32,909	-6,261	-16.0
Whole economy	2,322,561	2,218,004	-104,557	-4.5

Source: National Statistics Institute (NSI)

In the process of production and the creation of gross added value, industry (broadly defined, from A to F NACE Rev.2) has a contribution of 28.9% (2023). The share of services is slightly over two-thirds (67.6%) and that of agriculture and forestry 3.5%. Some 24.6% of all employees are employed in industry, and industry's share of employed workers and employees is 29.6%.

In three sectors (manufacturing, construction and water supply), which collect together 93% of industrial workers and 27% of those employed in the whole econo-

my, the wage is significantly below the national average (between 73% and 85%) (see Table 2). There is a concentration of employees of the Ministry of Health here. An additional negative impact on employees' sense of employment security in these sectors is the practice of incomplete social security observance in manufacturing and construction.

Table 2 – Levels of pay compared to the average wage for the country (2023) and relative share of employees on the minimum wage (2023 Q4), selected sectors

Economic sector	Average wage (BGN)	Percentage of national average wage	Share of employees on minimum wage (%)
Mining industry	2748	136.6	7.0
Manufacturing industry	1714	85.2	22.7
Production and distribution of electrical and thermal energy and gaseous fuels	3133	155.7	4.1
Water supply; sewer services, waste management and remediation	1477	73.4	13.4
Construction	1545	76.8	36.2
Whole economy	2012	-	-

Source: NSI; author's calculations. Note: 1 BGN = 0.51 euro.

More detailed analysis of economic activities within manufacturing shows that, in some areas, wage levels are shockingly low (see Table 3). The average wage in clothing manufacture, leather processing and shoe manufacturing, etc., the production of timber and wood products and furniture manufacturing is in the critical range of 50-60% of the average wage for the country. Two other industries (food manufacturing and textiles manufacture) are in the 'low paid' zone, with pay levels below 75% of the average. In only eight of the 22 economic activities within manufacturing industry are the results around or above the national average wage.

Of course, the main argument of business community representatives in Bulgaria against the demands of trade unions for a higher growth of wages is low growth in labour productivity. However, the data does not bear this out, as Table 4 explains.

Labour productivity in Bulgaria increased in 2021 by 7.4 points compared to 2020, while in 2022 it increased by 2.1 points on the 2021 level. This represents the largest growth in this indicator among the selected countries and communities included in the table. The growth of labour productivity in the EU-27 and the euro area is around half that of Bulgaria, and in Lithuania and Estonia is even decreasing significantly. Latvia, on the other hand, reports neither growth nor decline.

In fact, only nine countries in the EU-27 had higher labour productivity growth in 2022 compared to 2021 than Bulgaria (Eurostat 2024). Even a country like Germany reports an increase of only 0.5 points. This did not prevent the average wage in

Table 3 – Average wage by economic activities within manufacturing industry and percentages of national average wage (2023 Q4, without annual premiums)

	<b>Average wage (BGN)</b>	<b>Percentage of national average wage</b>
Production of food	1593	75.0
Production of beverages	2221	104.6
Production of tobacco	2785	131.2
Textiles manufacture	1493	70.3
Clothing manufacture	1100	51.8
Leather processing, shoe manufacturing, etc.	1071	50.4
Production of timber and wood products	1190	56.0
Production of paper, cardboard, etc. products	1843	86.8
Printing activity and the reproduction of recorded media	1707	80.4
Production of coke and refined petroleum products	3165	149.1
Production of chemical products	2074	97.7
Production of medicinal substances and products	2162	101.8
Production of rubber and plastic products	1772	83.5
Production of products from other non-metallic mineral raw materials	1858	87.5
Production of base metals	2432	114.5
Manufacture of metal products, without machinery	1862	87.7
Production of computer and communications equipment	2345	110.5
Manufacture of electrical equipment	2160	101.7
Production of machinery and equipment	2003	94.3
Production of cars, trailers and semi-trailers	1794	84.5
Manufacture of vehicles, excluding cars	2508	118.1
Furniture manufacturing	1290	60.8
<b>TOTAL</b>	<b>2123</b>	<b>100</b>

Source: NSI; author's calculations

Germany growing in 2022 compared to 2021 by approximately 4.2% (i.e. eight times higher than the growth in labour productivity). The same can be said for other countries if a similar comparison is made. Labour productivity grew on average in

Table 4 – Changes in labour productivity in Bulgaria compared to EU-27, the euro area and Baltic states, 2020-22 (rise or fall in percentage points)

	2020	2021	2022
EU-27	-4.3	4.0	1.3
Euro area	-4.7	4.0	1.0
Bulgaria	-1.7	7.4	2.1
Estonia	2.2	7.9	-5.6
Latvia	0.0	7.0	0.0
Lithuania	1.6	4.7	-3.0

Source: Eurostat (2024)

the EU-27 in 2022 by 1.3 percentage points, while the nominal average wage grew by 4.6% (over three times higher); in the euro area productivity grew by only 1 p.p. while the pay level grew on average by 4.4%; etc. As has already become clear, labour productivity in Estonia and Lithuania even decreased, but this did not prevent there being a nominal increase in wages for 2022.

This difference everywhere in the EU, including in Bulgaria, comes for two reasons. First of all, the relationship between wage growth and labour productivity growth does not rest on an equal footing in the calculation of the formula. For example, there is just one indicator in Bulgaria that measures labour productivity: gross added value per employee. When calculating this value, there is a very large number in the denominator which contains many things in itself, not only the contribution of labour. However, when calculating the rate of change in GVA per employee for the purposes of a comparison with the growth in wages, the entire value of the indicator is taken into account, not only that part that is proven to have come from labour. Thus, low values of labour productivity growth, as measured by this indicator, are obtained every year at the expense of much higher growth rates of nominal average wages.

In order to avoid this problem, it is necessary to equalise the total value of the gross added value of one employee as the denominator compared to the value of average wage for the relevant period. This is a methodological problem that has not been solved for many years. Otherwise, there will be no objective comparability and the wrong conclusions will follow from there.

Secondly, there is an increasing number of academic studies that clearly prove the relationship between the rates of change in these indicators to be disappearing. There is no statistically significant relationship, mainly as a result of the technological revolution which has largely changed the rules of the game. This relationship has been shown to be already broken in many individual EU countries through empirical research as a result of the increasing penetration of new technologies (Kostov 2019), and in the rest it is about to be broken over the course of the next decade.

In conclusion, when deciding to raise wages, a host of other factors must be taken into account such as: the unemployment rate, the employment rate, demographic characteristics, the level of technological progress, entrepreneurial spirit and the reinvestment of profits by the employer. This connection in Bulgaria in recent years has been broken precisely in such sectors where trade union representation is weak and, accordingly, the bargaining power of the worker is too low.

### Collective bargaining: theory and empirical evidence

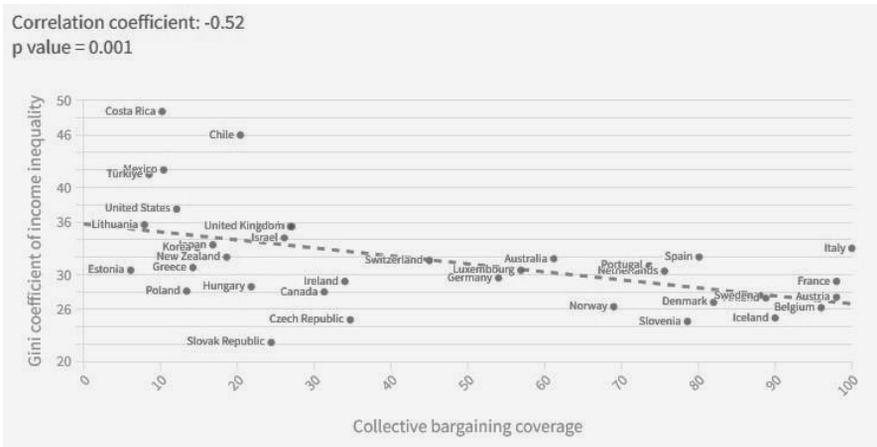
In the context of the alarming data presented in respect of Bulgarian industry, it must be quite openly said that collective bargaining could be the tool that the economy needs. This is the case in the particular context of the EU Directive on Adequate Minimum Wages, which is also concerned with the issue of reaching a collective bargaining coverage of 80% of employees across the EU-27.

While the goods market is imperfect, the competitive advantage of the labour market, which is dependent on the goods market, is not fairly distributed. Perfect competition does not exist in the modern conditions of economic relations, since it would imply the need for growth in collective bargaining coverage as a counterpoint to the formation of levels of pay that are lower than the equilibrium level. However, perfect competition is a theory. In the absence of collective bargaining, workers are always at a disadvantage in negotiations because of market imperfections and the presence of cartels, monopolies, oligopolies and monopolistic competition. In the conditions of the fourth industrial revolution, the need to rethink the role of collective bargaining as an instrument for the development of a true market economy can only expand.

The greater the coverage of collective bargaining, inequalities are lower and the response of the labour market to the imperfections of the market economy is more adequate. This is clearly visible from the analysis of the OECD (2019): collective bargaining can only contribute to labour market inclusiveness, and have a significant macroeconomic effect, if it covers a large share of workers and companies.

Economic literature suggests that collective bargaining plays a vital role in promoting equality of incomes. Furthermore, studies tend to indicate that a higher collective bargaining coverage rate is linked with reduced inequalities. Figure 1 confirms a negative correlation, of -0.52, between collective bargaining coverage and the Gini coefficient of income inequality for 37 countries around the world, which is a statistically significant finding. The majority of empirical studies on the subject in the last ten years confirm this negative correlation. The difference is only in the coefficient, but usually it varies between 0.3 to 0.6 pp.

Figure 1 – Correlation between Gini coefficient and collective bargaining coverage (%)



Source: OECD (2019); Darvas et al. (2023)

The case with Bulgaria is no different. Over the past three and a half years, cumulative inflation in Bulgaria, measured by the Consumer Price Index, is 33%<sup>1</sup> (2021 Q1 compared to 2024 Q2). During the same period, the nominal growth in average salaries was approximately 51%.<sup>2</sup> The dynamic series of national statistics shows that this higher nominal growth in the average wage occurred, with a significant lag effect, in relation to the sharp jump in the general Consumer Price Index. If we look at the numbers in detail, it is clear that, where there is union representation and collective agreements are concluded, wage growth is significantly higher than where this is not the case. NSI data on economic activities clearly show this trend. Therefore, it can be argued that, through the tool of collective bargaining, the real purchasing power of workers, lost relatively quickly in a time of inflation, has been overcome to a large extent. Of course, averages have their flaws, but the positive trend is demonstrable.

According to the latest data at national level, workers covered by collective bargaining agreements have a gross annual wage that is higher by 14% than peers who are not covered. This is an aggregated calculated value for all those employed in the country, showing the effect of unionisation on pay rates. If the aggregated data is presented as an hourly wage rate, workers covered by collective agreements receive a gross hourly wage that is 8.3% higher than non-covered ones.

Looking at enterprise level data, the gross annual salary of workers covered by collective bargaining agreements is 22.4% higher than that of non-covered workers.

1 <https://www.nsi.bg/en/content/2539/inflation-rate-calculator>.

2 <https://www.nsi.bg/en/content/3928/total>.

If these values are turned into an hourly rate, pay is 13.7% higher for workers benefiting from a collective agreement.

What are the problems with collective bargaining in Bulgaria?

One of the main problems faced by trade unions in Bulgaria is the low coverage rate of collective agreements, especially in the private sector. This leads to significant differences in working conditions and pay between different sectors and enterprises. In the private sector, the lack of collective agreements is often due to the reluctance of employers to bargain with trade unions. This also leads to inequalities and weakened worker protection.

The low coverage of collective agreements has serious implications for the credibility of trade unions and the collective bargaining process itself. This affects unionisation, and the influence of trade unions on labour relations, in several negative ways.

When collective agreement coverage is low, workers often see little or no real benefit from union membership. If unions fail to negotiate collective agreements that improve working conditions and wages, members and potential members may lose faith in the ability of unions to protect their interests effectively. This leads to reduced motivation for union participation and membership, as workers often do not see the point of paying dues or bothering to participate in union activities, and thus to a decline in union membership. In a very real sense therefore, the lack of effective collective agreements discourages workers from joining unions.

The low coverage of collective agreements in Bulgaria is the result of complex factors that hinder effective collective bargaining. Some of the main reasons faced by trade unions in practice include:

1. many employers refuse to negotiate clauses related to wage increases or the provision of additional remuneration. This leads to difficulties in the negotiation process and discourages workers from associating in union activities
2. some employers deliberately delay negotiations in order to avoid concluding a collective agreement. This delay leads to prolonged periods of uncertainty for workers and reduces the effectiveness of union efforts
3. even when a collective agreement has been concluded, employers often fail to implement the agreed clauses. This undermines the credibility of collective bargaining and discourages workers from union membership
4. when employers apply the provisions in the collective agreement to non-members, they undermine the value and benefits of union membership. This reduces workers' motivation to join union structures
5. many employers refuse to provide the necessary bargaining information to trade unions, making the negotiation process more difficult. The lack of transparency and access to information limits the possibilities for effective collective bargaining
6. some employers do not commence negotiations within one month of an invitation to engage in collective bargaining. This delay postpones important decisions and creates obstacles to the timely conclusion of agreements.

With this in view, it should be noted that one of the recommendations of the OECD is related to the need to provide employees with access to the management body of companies (via board-level employee representation) to ensure that workers have their own representatives advocating their interests. The Bulgarian corporate environment does not create the necessary conditions for the inclusion of labour representatives in the management body of companies. In practice, this means that the interests of workers in our country – to receive a salary that meets their needs and the added value they generate – can be neglected if the relevant prerequisites are missing.

Experience of and practice with board-level employee representation exists in a number of countries – in no fewer than 18 EU countries (Austria, Germany, Denmark, France, etc.) as well as in Norway. In only six of these countries is the participation of employee representatives in company management and supervisory bodies foreseen only for public enterprises, while in the remaining 12 the participation of employee representatives in management and supervisory bodies is foreseen also for private companies. Furthermore, the idea of such participation contains an understanding of why combining the guiding interest of the state and the interest of employees in the given enterprise, with a view to objective and efficient management, makes practical sense (Milanovic 2020). This is an additional mechanism for developing and enriching the existing forms of industrial democracy representation by creating opportunities for decision-making in areas which affect the enterprise as a whole.

At the same time, trade unions should play an important role in the design, implementation and application of pay transparency policies to promote equal pay for work of equal value in multinational corporations. Collective bargaining should be the instrument through which the redistribution of the added value produced in each country can be efficiently negotiated. The first step is a fair redistribution of added value between the individual divisions of the multinational in the respective countries according to the contributions of those working there. This bargaining can be done at a centralised level between unions and the headquarters operation of the multinational. In this way, the preservation of added value in the country where it was produced is guaranteed and there will be no outflow of capital, which will also stimulate competitiveness.

The next step is the valuation of added value produced in each respective country and what part of it should go to labour as the main factor of production. This should be negotiated at national level between the national trade unions and the relevant branch of the multinational, thus agreeing the wages of workers according to their output and contribution.

Establishing a monitoring mechanism in which multinational companies report on the wages of their workers by added value in different member states is thus essential. This could form an expansion of existing databases and, taken to supranational level, could form an indicator as part of annual benchmarking reports.

In the case of gross pay gaps in respect of work of equal value, there should be a mechanism under which additional wages are paid to workers in order to reach wage

levels that reflect the same positions and the same added value as in other member states.

Many workers and even some employers are not sufficiently aware of their rights and obligations with regard to association in trade unions and to collective bargaining. The lack of information and education on these issues leads to low awareness about the possibilities for legal protection and, consequently, complaints and whistleblowing are rare. Additionally, law enforcement and the judiciary are frequently not sufficiently effective in investigating and sanctioning cases of pressure mounted against union association. The lack of sufficient resources, specialist staff and bureaucratic obstacles lead to delays and inefficiency in the handling of such cases.

Moreover, workers are often afraid to file complaints against their employers for fear of reprisals, including dismissal, demotion or worsened working conditions. This fear further reduces the number of reported incidents of violence or other threats related to association in trade unions.

At the same time, there are legal issues within Bulgaria and in other countries too surrounding trade unions representing civil servants in the Ministry of the Interior as well as judicial officials (judges, prosecutors, investigators, etc.) being prohibited from belonging to a federation or confederation of trade unions. This is not in line with ILO Convention 87 which envisages such exclusionary measures to be applied only in respect of armed forces and the police.

Furthermore, the high proportions of informal employment, together with the prevalence of low-income workers prevent employees from joining unions.

## Conclusion

Together with the unfavourable environment and the lack of investment in new technologies, the human factor remains among the leading problems right across industry in Bulgaria. The demographic crisis, on top of the shortage of staff and skilled labour, requires adequate legislative and practical actions in the direction of strengthening the role of trade unions through the instruments of collective bargaining.

Industry is the sector that directly affects the development opportunities of both the agrarian sector and the service sector, producing the necessary machines, equipment and facilities for their activities. Industry needs state support, which is not about subsidies (i.e. what is available within agriculture under European funds), but about having a purposeful industrial policy for the creation of the necessary infrastructure, effective financing and credit tools (for working capital and capital investments). This can only be done by fully guaranteeing rights of association and by making workers truly part of the process by also allowing them to participate in the management of companies.

The empirical data presented in this article clearly show that collective bargaining leads to a definite benefit for workers, guaranteeing them wages that are at least 14% higher compared to the situation in which there is no collective agreement. And, over the past three and a half years, this has proven to be key in the context

of the need to recover, and quickly, the real purchasing power lost to high levels of inflation.

However, industry faces a number of challenges that cannot be solved without an enhanced role of human capital. Trade unions in Bulgaria play an essential role in protecting workers' labour rights, but face significant challenges that prevent the full realisation of fundamental labour rights such as the right to freedom of association and collective bargaining. These challenges are particularly pronounced in the private sector, where collective bargaining coverage remains low.

Finally, it is crucial that the Bulgarian economy uses this opportunity to modernise and transform its industrial sector and their supply chains so that they remain competitive in the transition to climate neutrality. This is only possible through investment across the region in the best available technologies, technology renewal and transfer, and the use of effective public procurement criteria.

Investment in industry in Bulgaria is no longer dependent on the presence of low labour costs. This model has ensnared countries in the region in a low-wage trap and has caused labor shortages and increased pressure for flows of migration. Real wages must rise, ensuring a fair share of productivity growth and supporting a wage-led recovery. Economic convergence should also be supported by strategies to promote wage convergence between eastern and western Europe in the industrial sector.

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