



10 February 2023
LABOUR COST INDEX
4th quarter of 2022

THE LABOUR COST INDEX INCREASED BY 1.4% IN THE 4th QUARTER OF 2022 AND BY 3.2% IN 2022

In the 4th quarter of 2022, the Labour Cost Index (LCI) recorded a year-on-year increase of 1.4%. In the previous quarter, it had increased 4.3%.

The wage costs (per hour actually worked) increased by 1.4%, and the other labour costs (also per hour actually worked) increased by 1.3%, compared with the same period of the previous year.

The year-on-year change of the LCI resulted from the increase of 4.7% in the average cost per employee and the growth of 3.4% in the number of hours actually worked per employee. The increase of the first component was common to all the economic activities, with the highest variations being recorded in activities of sections B to N (5.0% in Industry, 4.7% in Construction and 5.9% in Services). The Public Administration recorded a lower increase, of 3.3%. The hours actually worked per employee also increased in all economic activities, with the lowest variation being recorded in Construction (1.9%) and the highest in the Public Administration (5.6%). The LCI increased in all economic activities, having decreased only in the Public Administration (2.0%).

In 2022, the LCI increased by 3.2%, corresponding to increases of 3.0% in the wage costs and of 4.0% in the other labour costs. The increase in non-wage costs was due to the increase in employers' contributions as a result of the progressive reduction of enterprises that joined the simplified layoff regime in the private sector of the economy. The average cost per employee increased by 4.3% and the number of hours actually worked per employee increased by 1.3%.

1. Labour Cost Index and components

In the 4th quarter of 2022, the LCI, which measures the labour costs per hour actually worked, increased by 1.4% compared with the same quarter of 2021 (it had increased by 4.3% in the preceding quarter).¹

The wage costs (per hour actually worked) increased by 1.4% (4.3% in the previous quarter) and the other labour costs (also per hour actually worked) increased by 1.3% (4.3% in the previous quarter) (Figure 1)².

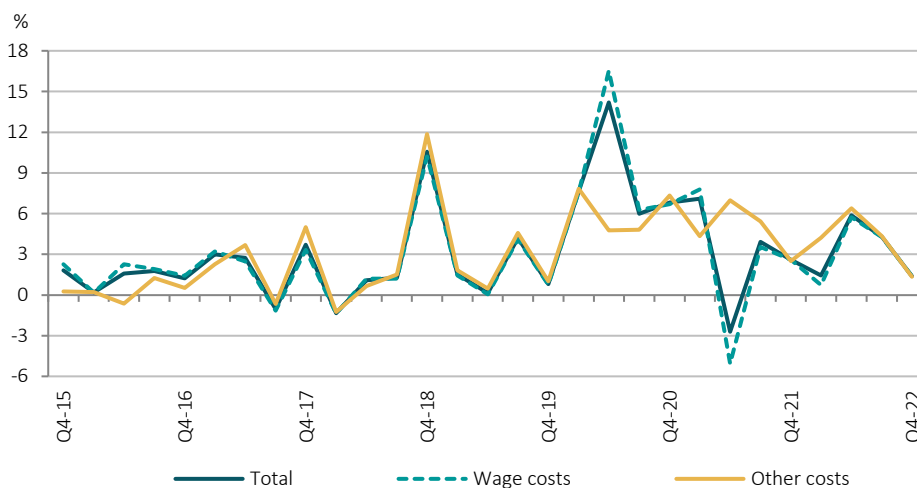
¹ It should be noted that wage costs considered in the LCI computation include those that were partially supported by Social Security in the scope of the employment protection measures, with the implementation, in particular, of the simplified layoff regime in the pandemic context. These amounts cannot be identified in the primary data used to calculate the LCI. Therefore, although from the economy perspective the LCI reflects the behaviour of the hourly labour costs, from the enterprises' perspective these costs tend to be overestimated during the period these measures were in place.

² The data analysed in this press release are adjusted for working days. The raw data are available in the annex tables and at the Official Statistics Portal.



Figure 1. LCI year-on-year rate of change by components

(working days adjusted data)



Source: Statistics Portugal, Labour Cost Index – 4th quarter of 2022.

In the 4th quarter of 2022, the wage costs recorded the highest increase in Services (3.6%), while a decrease of 2.0% was observed in the Public Administration. In the preceding quarter, except for Services, where the variation remained unchanged, all the economic activities had recorded higher increases than those registered in this quarter.

The non-wage costs, as the wage costs, recorded smaller increases than those observed in the previous quarter, except for the Public Administration, which registered a decrease of 2.0%.

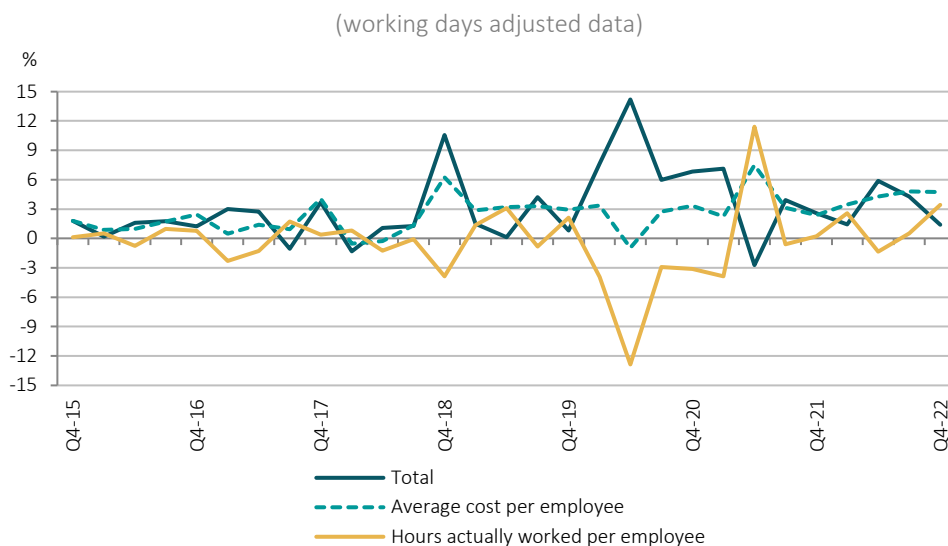
The decrease of the wage costs and the non-wage costs in the Public Administration was due to the greater increase, of 5.6%, in the number of hours actually worked per employee.

The non-wage and wage costs recorded equal variations in Construction and in the Public Administration, with differences being observed in Industry (2.6% and 2.7%, respectively) and in Services (3.2% and 3.6%, respectively). The identical variation of the wage costs and the other costs was a result of the normalization of the payment of the social contributions by the enterprises that, during the COVID-19 pandemic, joined the simplified layoff regime or the extraordinary support for progressive resumption of activity, being exempted from the payment of the employers' contributions. The payment of the employers' contributions was recovered in the 2nd quarter of 2021, having the other costs registered a more pronounced increase than that of the wage costs in the 2nd and 3rd quarters of 2021 and in the 1st and 2nd quarters of 2022.

The LCI increase was also explained by the growth of 4.7% in the average cost per employee (it had increased by 4.8% in the preceding quarter) and the increase of 3.4% in the number of hours actually worked per employee (it had increased by 0.5% in the previous quarter) (Figure 2).



Figure 2. LCI year-on-year rate of change by source of variation



Source: Statistics Portugal, Labour Cost Index – 4th quarter of 2022.

The average cost per employee recorded a smaller increase than the one observed in the preceding quarter in all economic activities, except for Services. The highest variations were registered in the activities from sections B to N (5.0% in Industry, 4.7% in Construction and 5.9% in Services) and the lowest in the Public Administration (3.3%). The increases in the Public Administration have been lower than those in the other activities since the 1st quarter of 2021.

The number of hours actually worked per employee increased in all economic activities, having the highest increase been observed in the Public Administration (5.6%) and the lowest in Construction (1.9%). In the previous quarter, the number of hours actually worked per employee decreased in Industry and the Public Administration.

In 2022, the LCI registered an increase of 3.2%, corresponding to increases of 3.0% in the wage costs and of 4.0% in the other costs. The average cost per employee increased by 4.3% and the number of hours actually worked per employee increased by 1.3%.

In 2021, the LCI had increased 2.5%, corresponding to increases of 1.9% in the wage costs and of 4.8% in the other costs. The average cost per employee had increased by 3.8% and the number of hours actually worked per employee by 1.6%.

2. Sectors of economic activity

In the 4th quarter of 2022, in the subgroup of economic activities belonging to sections B to N (which broadly cover the private sector of the economy), the LCI increased by 3.2%.



In the remaining economic activities (sections O to S), which include mostly (but not exclusively) the public sector of the economy, the LCI recorded a year-on-year decrease of 2.0%.

In 2022, the LCI registered an increase of 4.2% in the activities that belong to sections B to N (2.8% in 2021) and an increase of 1.5% (1.9% in 2021) in the activities from sections O to S.

Sections B to N

In the 4th quarter of 2022, in the activities from sections B to N, compared with the same quarter of 2021, it was observed that:

- the wage costs increased by 3.3% and the other labour costs increased by 3.0% (Figure 3);
- the average labour cost per employee increased by 5.5% (Figure 4);
- the number of hours actually worked per employee increased by 2.3% (Figure 4).

Among the activities from sections B to N, the LCI increased by 2.7% in Industry (sections B to E), by 2.8% in Construction (section F), and by 3.5% in Services (sections G to N).

In Industry (2.7%):

- the wage costs increased by 2.7% and the other labour costs increased by 2.6%;
- the average cost per employee increased by 5.0%;
- the number of hours actually worked per employee increased by 2.3%.

In Construction (2.8%):

- the wage costs and the other labour costs increased by 2.8%;
- the average cost per employee increased by 4.7%;
- the number of hours actually worked per employee increased by 1.9%.

In Services (3.5%):

- the wage costs increased by 3.6% and the other labour costs increased by 3.2%;
- the average cost per employee increased by 5.9%;
- the number of hours actually worked per employee increased by 2.4%.

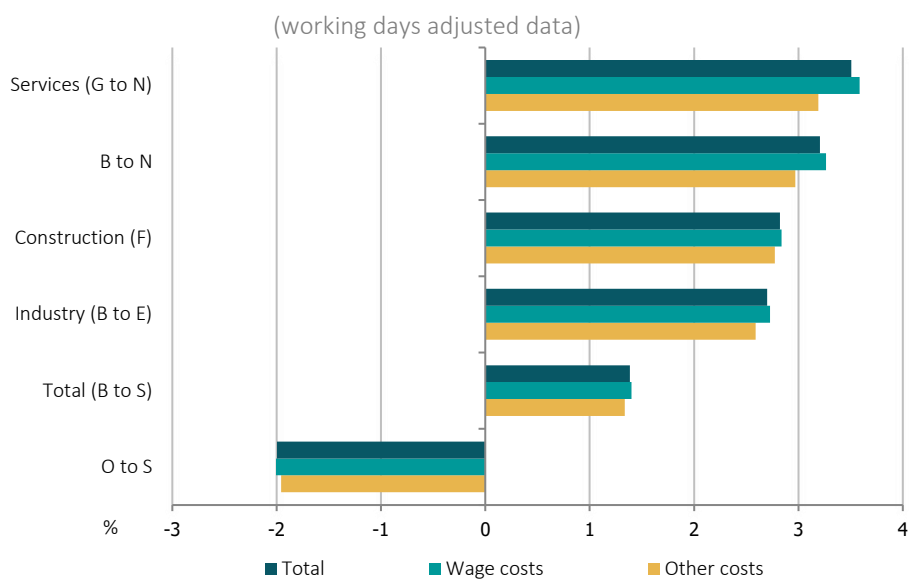
Sections O to S

In the 4th quarter of 2022, in the activities from sections O to S, the LCI recorded a decrease of 2.0%. In these activities:



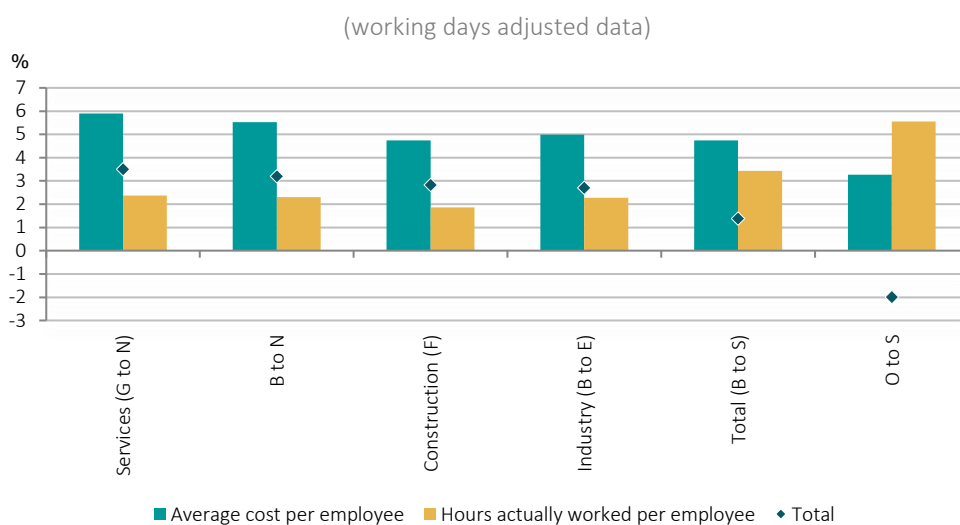
- the wage costs and the other labour costs decreased by 2.0%;
- the average cost per employee increased by 3.3%;
- the number of hours actually worked per employee increased by 5.6%.

Figure 3. LCI year-on-year rate of change by index component and economic activity in the 4th quarter of 2022



Source: Statistics Portugal, Labour Cost Index – 4th quarter of 2022.

Figure 4. LCI year-on-year rate of change by index source of variation and economic activity in the 4th quarter of 2022



Source: Statistics Portugal, Labour Cost Index – 4th quarter of 2022.



3. Comparison with the European Union

The latest available information by country on the LCI year-on-year rate of change reports to the 3rd quarter of 2022 and was published by Eurostat on the 19th of December of 2022 (Figure 5).

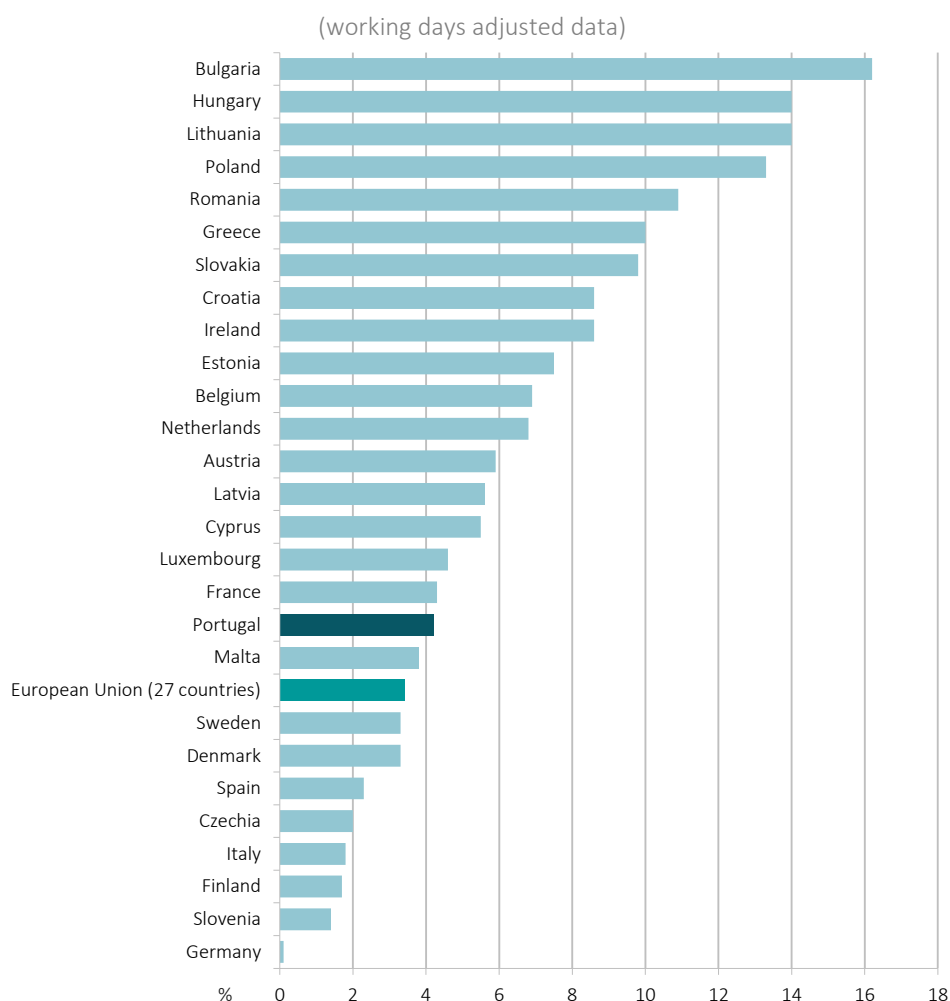
The LCI year-on-year rate of change for the European Union (27 countries) was 3.4%, in the 3rd quarter of 2022.

Nineteen countries recorded LCI rates of change larger than the European Union average, with Bulgaria recording the largest LCI increase (16.2%).

In eight countries, the LCI recorded a lower increase than the European Union average, between 0.1% in Germany, and 3.3% in Sweden.

For Portugal, Eurostat estimated a year-on-year increase, of 4.2%.

Figure 5. LCI year-on-year rate of change by European Union Country (27) in the 3rd quarter of 2022



Source: Eurostat, Labour Cost Index – 3rd quarter of 2022.



Table 1. LCI year-on-year rate of change by index component and economic activity (NACE-Rev. 2)
(working days adjusted data)

Economic activity (sections from Nace-Rev. 2)	Q1-2022			Q2-2022			Q3-2022			Q4-2022			2021			2022		
	Total	Wage costs	Other costs	Total	Wage costs	Other costs	Total	Wage costs	Other costs	Total	Wage costs	Other costs	Total	Wage costs	Other costs	Total	Wage costs	Other costs
	%																	
Total (B to S)	1.4	0.7	4.2	5.9	5.7	6.4	4.3	4.3	4.3	1.4	1.4	1.3	2.5	1.9	4.8	3.2	3.0	4.0
B to N	3.1	2.2	6.3	6.2	6.0	6.8	4.4	4.4	4.5	3.2	3.3	3.0	2.8	2.0	5.7	4.2	4.0	5.1
Industry (B to E)	2.3	2.1	2.8	7.3	7.2	7.4	5.9	5.9	5.8	2.7	2.7	2.6	3.1	2.1	6.6	4.5	4.5	4.7
Construction (F)	6.3	6.2	6.6	7.0	7.0	7.0	4.7	4.7	4.7	2.8	2.8	2.8	6.9	6.6	7.8	5.1	5.1	5.2
Services (G to N)	3.0	1.7	8.1	5.5	5.2	6.5	3.6	3.6	3.8	3.5	3.6	3.2	2.1	1.3	5.0	3.9	3.6	5.3
O to S	-1.6	-1.9	0.0	5.3	5.3	5.6	4.1	4.1	4.1	-2.0	-2.0	-2.0	1.9	1.8	2.2	1.5	1.4	1.9

Source: Statistics Portugal, Labour Cost Index – 4th quarter of 2022.

Table 2. LCI year-on-year rate of change by index component and economic activity (NACE-Rev. 2)
(non-working days adjusted data)

Economic activity (sections from Nace-Rev. 2)	Q1-2022			Q2-2022			Q3-2022			Q4-2022			2021			2022		
	Total	Wage costs	Other costs	Total	Wage costs	Other costs	Total	Wage costs	Other costs	Total	Wage costs	Other costs	Total	Wage costs	Other costs	Total	Wage costs	Other costs
	%																	
Total (B to S)	-0.2	-0.8	2.6	7.6	7.5	8.1	5.9	5.9	5.9	3.0	3.1	3.0	2.0	1.5	4.3	4.2	4.0	4.9
B to N	1.4	0.6	4.7	7.9	7.7	8.6	6.0	6.0	6.1	4.9	5.0	4.7	2.2	1.5	5.3	5.1	4.9	6.0
Industry (B to E)	0.7	0.5	1.2	9.0	9.0	9.2	7.5	7.5	7.4	4.4	4.4	4.3	2.6	1.7	6.2	5.5	5.4	5.6
Construction (F)	4.7	4.6	4.9	8.8	8.8	8.7	6.3	6.3	6.3	4.5	4.5	4.5	6.4	6.2	7.4	6.0	6.0	6.1
Services (G to N)	1.4	0.2	6.4	7.2	7.0	8.2	5.2	5.2	5.4	5.2	5.3	4.9	1.5	0.9	4.6	4.8	4.5	6.2
O to S	-3.1	-3.5	-1.6	7.1	7.0	7.3	5.7	5.7	5.7	-0.4	-0.4	-0.3	1.4	1.4	1.8	2.4	2.3	2.8

Source: Statistics Portugal, Labour Cost Index – 4th quarter of 2022.

Sections from Nace-Rev. 2

B - Mining and quarrying

C - Manufacturing

D - Electricity, gas, steam and air conditions supply

E - Water supply, sewerage, waste management and remediation activities

F - Construction

G - Wholesale and retail trade; repair of motor vehicles and motor cycles

H - Transport and storage

I - Accommodation and food service activities

J - Information and communication

K - Financial and insurance activities

L - Real estate activities

M - Professional, scientific and technical activities

N - Administrative and support service activities

O - Public administration, defence, and compulsory social security

P - Education

Q - Human health and social work activities

R - Arts, entertainment and recreation

S - Other service activities



Table 3. LCI year-on-year rate of change by index source of variation and economic activity (NACE-Rev. 2)
(working days adjusted data)

Economic activity (sections from Nace-Rev. 2)	Q1-2022			Q2-2022			Q3-2022			Q4-2022			2021			2022		
	Total	Average cost per employee	Hours actually worked per employee	Total	Average cost per employee	Hours actually worked per employee	Total	Average cost per employee	Hours actually worked per employee	Total	Average cost per employee	Hours actually worked per employee	Total	Average cost per employee	Hours actually worked per employee	Total	Average cost per employee	Hours actually worked per employee
	%																	
Total (B to S)	1.4	3.5	2.6	5.9	4.3	-1.3	4.3	4.8	0.5	1.4	4.7	3.4	2.5	3.8	1.6	3.2	4.3	1.3
B to N	3.1	4.2	1.8	6.2	5.2	-0.7	4.4	5.4	1.0	3.2	5.5	2.3	2.8	4.9	2.3	4.2	5.1	1.1
Industry (B to E)	2.3	3.0	0.7	7.3	4.7	-2.2	5.9	5.2	-0.6	2.7	5.0	2.3	3.1	5.7	2.4	4.5	4.5	0.0
Construction (F)	6.3	4.7	-1.5	7.0	5.1	-1.7	4.7	5.2	0.5	2.8	4.7	1.9	6.9	4.4	-2.4	5.1	4.9	-0.2
Services (G to N)	3.0	4.8	2.8	5.5	5.4	0.1	3.6	5.5	1.9	3.5	5.9	2.4	2.1	4.5	2.8	3.9	5.4	1.8
O to S	-1.6	2.1	4.0	5.3	2.6	-2.5	4.1	3.7	-0.4	-2.0	3.3	5.6	1.9	1.7	0.1	1.5	2.9	1.7

Source: Statistics Portugal, Labour Cost Index – 4th quarter of 2022.

Table 4. LCI year-on-year rate of change by index source of variation and economic activity (NACE-Rev. 2)
(non-working days adjusted data)

Economic activity (sections from Nace-Rev. 2)	Q1-2022			Q2-2022			Q3-2022			Q4-2022			2021			2022		
	Total	Average cost per employee	Hours actually worked per employee	Total	Average cost per employee	Hours actually worked per employee	Total	Average cost per employee	Hours actually worked per employee	Total	Average cost per employee	Hours actually worked per employee	Total	Average cost per employee	Hours actually worked per employee	Total	Average cost per employee	Hours actually worked per employee
	%																	
Total (B to S)	-0.2	3.5	4.2	7.6	4.3	-2.9	5.9	4.8	-1.0	3.0	4.7	1.8	2.0	3.8	2.0	4.2	4.3	0.5
B to N	1.4	4.2	3.4	7.9	5.2	-2.3	6.0	5.4	-0.5	4.9	5.5	0.7	2.2	4.9	2.7	5.1	5.1	0.3
Industry (B to E)	0.7	3.0	2.3	9.0	4.7	-3.7	7.5	5.2	-2.2	4.4	5.0	0.6	2.6	5.7	2.8	5.5	4.5	-0.8
Construction (F)	4.7	4.7	0.0	8.8	5.1	-3.3	6.3	5.2	-1.0	4.5	4.7	0.2	6.4	4.4	-2.0	6.0	4.9	-1.0
Services (G to N)	1.4	4.8	4.5	7.2	5.4	-1.5	5.2	5.5	0.3	5.2	5.9	0.7	1.5	4.5	3.1	4.8	5.4	1.0
O to S	-3.1	2.1	5.6	7.1	2.6	-4.1	5.7	3.7	-1.9	-0.4	3.3	3.8	1.4	1.7	0.6	2.4	2.9	0.9

Source: Statistics Portugal, Labour Cost Index – 4th quarter of 2022.

Note: The name of the activities can be found in the previous page.



TECHNICAL NOTE

With the publication of the results for the 1st quarter of 2019, Statistics Portugal started the dissemination of a new series of the Labour Cost Index (LCI), with the base year in 2016, in line with Eurostat's procedure for the Labour Cost Index, whenever new data of the (quadrennial) Labour Cost Survey become available.

With the publication of the results for the 1st quarter of 2020, Statistics Portugal started to include, in the LCI calculation, regarding the information related to the labour costs obtained from administrative sources, data corresponding to the universe of about 386 thousand entities (instead of the actual sample of around 4 100 entities), which declared earnings for a total of 4.2 million workers. The information on hours actually worked continues to be obtained by direct inquiry from the entities that belong to the LCI sample, and no changes were introduced at this level. For the O, P and Q sections of NACE-Rev. 2 estimates of the number of hours actually worked per employee from the Labour Force Survey are used.

The back series for all indices, from the 1st quarter of 2008, are available at the Official Statistics website.

The LCI is a short-term indicator that measures quarterly developments in labour costs per hour actually worked (hourly average cost) incurred by the employer. The index is calculated by dividing the average cost per employee by the number of hours actually worked per employee. For this reason, the evolution of these two variables (labour costs and hours worked) contribute to explaining the development of the LCI.

Labour costs incurred by the employer correspond to that reported by the entities to the Social Security (*Declaração Mensal de Remunerações*) and to the *Caixa Geral de Aposentações (Relação Contributiva)* include the following:

Wage costs:

- Base wage
- Regular bonuses and allowances
- Irregular bonuses and allowances (holiday bonus, Christmas bonus, end-of-year bonuses/distribution of profits, other irregular bonuses and allowances)
- Payment of overtime

Other costs:

- Severance payment
- Employers' legal costs (social security contributions, insurance against accidents and occupational disease)
- Collectively agreed, contractual and voluntary costs (supplementary pension/invalidity benefit, health insurance, life/personal accident insurance, and social benefits paid directly to employees in case of absence on account of sickness)



Quarterly data collection on the hours worked in the enterprises is carried out through an electronic questionnaire (Computer Assisted Web Interviewing - CAWI).

By economic activity, the LCI covers Sections B to S of NACE-Rev. 2.

The LCI is a Laspeyres index.

In order to obtain more information about the LCI calculation, we recommend consulting the [methodological note](#) (only in Portuguese) for this statistical operation.

INFORMATION SELECTED FOR PUBLICATION

This Press Release analyses changes in the total LCI and respective items: 1) wage costs versus other costs; and 2) average costs per employee versus number of hours actually worked per employee.

Given that the LCI is seasonal, data are presented as year-on-year rates of change, which compare index levels in the current quarter with those for the same quarter a year earlier. The series of index figures are available on the Official Statistics website.

With the purpose of eliminating the effects of a different number of working days in similar quarters of different years (Easter and other movable feasts), the series analysed are adjusted for working days. Raw series, not adjusted for working day effects, are available in the annex tables and on the Official Statistics website.

REVISIONS

The Data published in this Press Release concerning the last quarters are subject to revisions. These revisions are the result of the inclusion of information relating to the previous quarter sent late by some enterprises of the sample survey on hours worked and from the update of information obtained through administrative sources, namely data from the *Declaração Mensal de Remunerações* reported by enterprises to Social Security.

The impact of these revisions, measured by the difference between the year-on-year rates of change now available and those published for the 3rd quarter of 2022 in the Press Release “Labour Cost Index – 3rd quarter of 2022”, is presented in the following table:



Revision of the LCI year-on-year rates of change published in the 3rd quarter of 2022

Economic activity (sections from Nace- Rev. 2)	Working days adjusted data					Non working days adjusted data				
	Total	Component of the index		Source of variation of the index		Total	Component of the index		Source of variation of the index	
		Wage costs	Other costs	Average cost	Hours actually worked		Wage costs	Other costs	Average cost	Hours actually worked
	Per hour actually worked			Per employee		Per hour actually worked			Per employee	
%										
Total (B to S)	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.0
B to N	0.2	0.2	0.3	0.2	0.0	0.2	0.2	0.3	0.2	0.0
Industry (B to E)	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.0
Construction (F)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Services (G to N)	0.2	0.3	0.3	0.2	0.0	0.3	0.3	0.3	0.2	-0.1
O to S	0.3	0.3	0.3	0.2	0.0	0.3	0.3	0.3	0.2	0.0

Source: Statistics Portugal, Labour Cost Index – 3rd quarter of 2022.

Due to rounding, the sum of the components may not equal to the corresponding totals.

This Press Release was prepared with the data received up to the 30th of January of 2023. The response rate of the LCI survey on hours worked was 93%.

ACRONYMS AND ABBREVIATIONS

Eurostat – Statistical Office of the European Union

LCI – Labour Cost Index

NACE-Rev. 2 – Statistical Classification of Economic Activities in the European Communities, Revision 2

Next quarterly press release -12th May of 2023
