

February, 14th 2016

Labour Cost Index
4th quarter of 2016

In the 4th quarter of 2016, the Labour Cost Index increased by 1.2% when compared to the same quarter in 2015. In terms of the annual average, it increased by 1.6% in 2016

The Labour Cost Index (LCI) working days adjusted increased by 1.2% in the 4th quarter of 2016, compared with the same period in 2015. In the previous quarter, it was recorded a year-on-year increase of 2.8%.

The two main labour cost components are wage costs and other costs (per hour actually worked). Both wage costs and other costs increased by 1.2% from the same period a year earlier.

In terms of the annual average, the Labour Cost Index increased by 1.6% in 2016, due to the rise of 1.8% in wage costs and of 0.9% in other labour costs. In the previous year, the LCI had recorded also an increase of 1.6% (corresponding to rates of change of 1.3% and of 2.6% in the wage costs and other costs, respectively).

1. Labour Cost Index and components

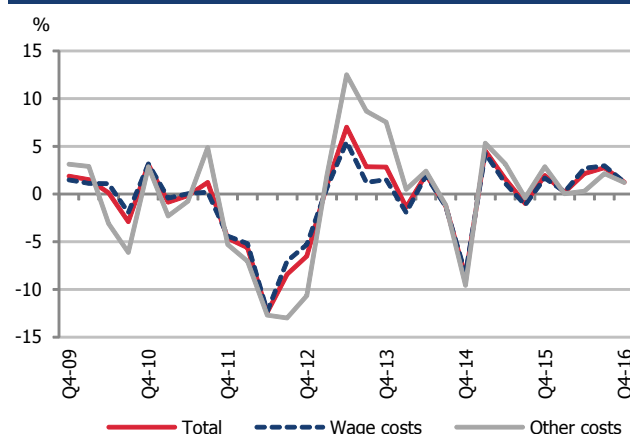
The labour costs incurred by the employer include *wage costs* and *other labour costs* of their responsibility (see the Technical note on page 7). Therefore, their evolution depends on the development of each of these components.

The labour Cost Index (LCI) is a short term indicator, which, in addition to the labour costs incurred by the employer, considers the number of hours actually worked per employee, measuring the evolution of the *average labour costs per hour actually worked*.

In the 4th quarter of 2016¹, the LCI recorded an increase of 1.2% due to increases of 1.2% in wage costs and in other labour costs (Figure 1).

For that evolution also contributed the increases of 2.4% in the average cost per employee and of 0.8% in the number of hours actually worked per employee (Figure 2, next page).

Figure 1: LCI year-on-year rate of change (working days adjusted data)

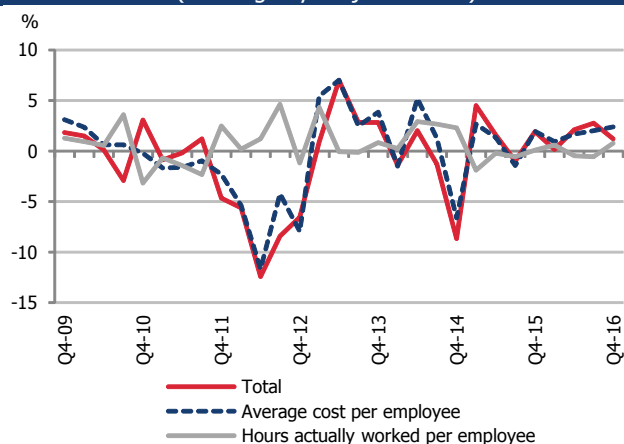


In 2016, the LCI was up by 1.6% compared to the previous year due to increases of 1.8% in wage costs and of 0.9% in other costs. For that increase contributed also the increases of 1.8% in the average labour cost per employee and of 0.1% in the number of hours actually worked per employee.

¹ The data analysed in this Press Release are working days adjusted. The raw data are available in the annex tables and at the Official Statistics Portal. Unless otherwise stated, the rates of change mentioned in this Press Release are year-on-year rates of change (from the same quarter of the previous year).

In 2015, the LCI had recorded also an increase of 1.6%, corresponding to increases of 1.3% and of 2.6% in wage costs and in other costs, respectively.

Figure 2: LCI year-on-year rate of change (working days adjusted data)



2. Sectors of economic activity

For the subgroup of economic activities from sections B to N² (which include, in general, the business economy or the private sector of the economy), the LCI decreased by 0.8%.

In the remaining economic activities (sections O to S), which include mostly (but not exclusively) the non-business economy of the public sector of the economy, it was recorded a year-on-year increase of 4.3%.

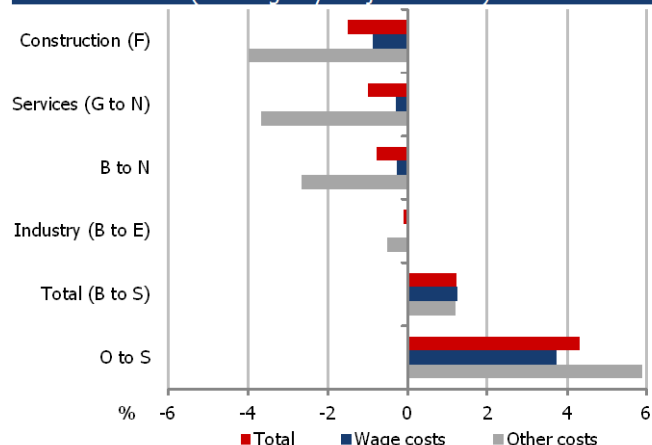
In 2016, the LCI recorded an annual decrease of 0.1% in the activities from sections B to N and an increase of 4.0% in the activities from sections O to S.

Sections B to N

In the 4th quarter of 2016, in the activities from sections B to N, compared to the same quarter of 2015:

- the wage costs decreased by 0.3% and the other labour costs increased by 2.7% (Figure 3);
- the average labour cost per employee increased by 1.6% (Figure 4);
- the number of hours actually worked per employee increased by 2.3% (Figure 4).

Figure 3: LCI year-on-year rate of change by economic activity (NACE-Rev. 2) in the 4th quarter of 2016 (working days adjusted data)



Among the activities from sections B to N, the LCI decreased by 0.1% in Industry (sections B to E), by 1.5% in Construction (section F), and by 1.0% in Services (G to N).

In Industry (-0.1%):

- the wage costs remained unchanged compared to the same quarter of the previous year and the other labour costs decreased by 0.5%;
- the average cost per employee increased by 2.5%;
- the number of hours actually worked per employee increased by 2.6%.

In Construction (-1.5%):

- the wage costs decreased by 0.9% and the other labour costs decreased by 4.0%;

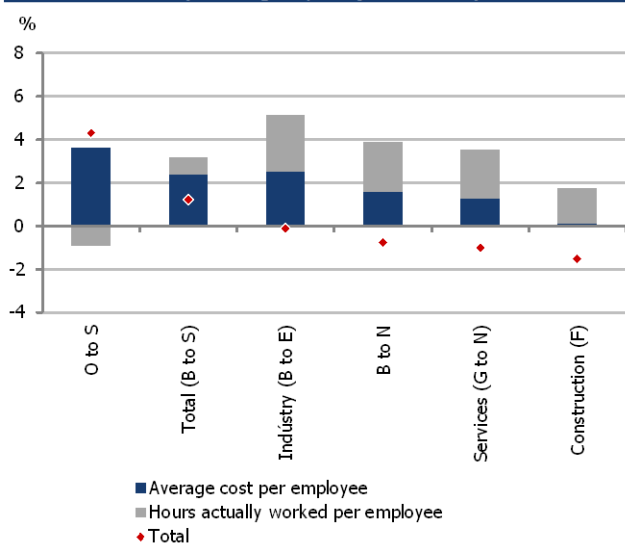
² The activities' designation is available in the annex tables.

- the average cost per employee increased by 0.1%;
- the number of hours actually worked per employee increased by 1.7%.

In Services (-1.0%):

- the wage costs decreased by 0.3% and the other labour costs decreased by 3.7%;
- the average cost per employee increased by 1.3%;
- the number of hours actually worked per employee increased by 2.3%.

Figure 4: LCI year-on-year rate of change by economic activity (NACE-Rev. 2) in the 4th quarter of 2016 (working days adjusted data)



In 2016, compared to the previous year, the LCI increased by 0.9% in Industry (sections B to E) and decreased by 0.5% in Construction (section F) and by 0.7% in Services (sections G to N).

Sections O to S

In the activities from sections O to S, the LCI recorded an increase of 4.3% in comparison with the same quarter of the previous year. In these activities:

- the wage costs and the other labour costs increased by 3.7% and 5.9%, respectively;
- the average cost per employee increased by 3.6%, which was partially explained by the ongoing progressive elimination of the wage reductions (ended in the 4th quarter of 2016);
- the number of hours actually worked per employee decreased by 0.9%, which might be related to the return to the 35 weekly normal hours (in place since July 2016) and to the number of working days of the reference quarters (less 3 working days in the 4th quarter of 2016 than in the 4th quarter of 2015).

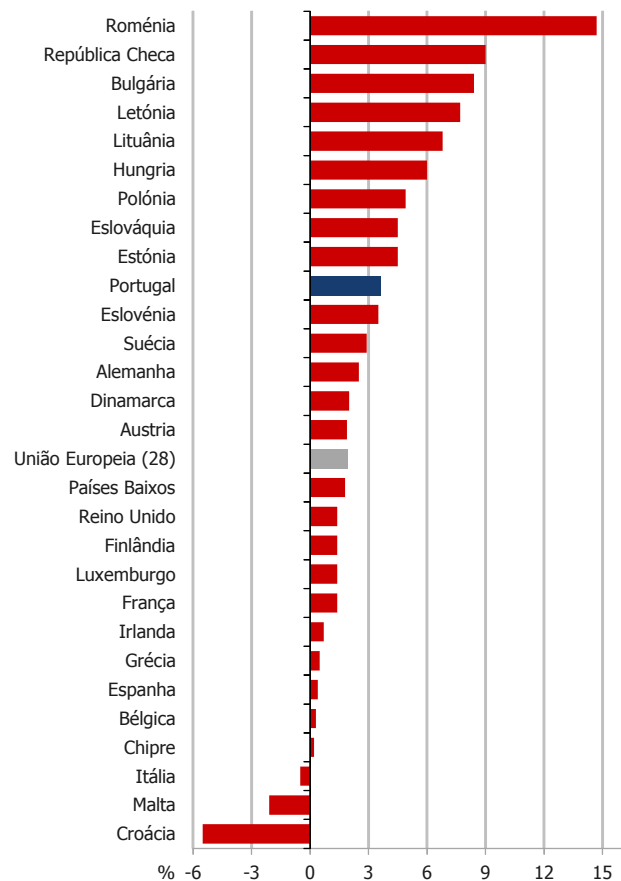
In 2016, the LCI recorded an annual increase of 4.0% in the activities from sections O to S.

3. Comparison with the European Union

The latest available information by country on the LCI year-on-year change reports to the 3rd quarter of 2016 and was published by Eurostat in the 19th December of 2016 (Figure 5).

The LCI year-on-year rate of change for the European Union (28 countries) was 1.9%, in the 3rd quarter of 2016.

Figure 5: LCI year-on-year rate of change by European Union Country (28) in the 3rd quarter of 2016 (working days adjusted data)



Austria recorded the same rate of change of the European Union (1.9%).

In fourteen countries, the LCI rates of change were larger than the European Union average, with Romania recording the largest LCI increase (of 14.7%).

Portugal registered a year-on-year increase in the LCI of 3.6%.³

In ten other countries, the LCI recorded increases, albeit lower than the European Union average, from 0.2%, in Cyprus, to 1.8% in the Netherlands.

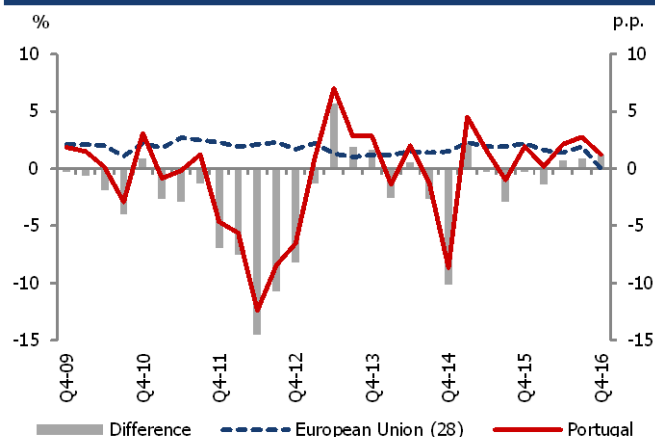
³ The increase for Portugal was now revised into 2.8% (as described in the Technical note, page 8).

Three countries recorded decreases in the LCI: Croatia (5.5%), Malta (2.1%) and Italy (0.5%).

Figure 6 shows the developments of the LCI rates of change in Portugal and in the European Union in the last seven years (from the 4th quarter of 2009 to the 4th quarter of 2016).

Its analysis shows that, in the considered period, the LCI in Portugal registered lower changes than those of the European Union.

Figure 6: LCI year-on-year rate of change in the European Union (28) and in Portugal (working day adjusted data)



After the substantial decreases recorded in 2011, 2012 and 2014, in 2016 the LCI observed always year-on-year increases, of 0.2% in the 1st quarter, 2.1% in the 2nd quarter, 2.8% in the 3rd quarter and 1.2% in the 4th quarter. In the 1st quarter, the increase was lower than that of the European Union (1.6%). In the 2nd and 3rd quarters, the increases were larger than the average of the European Union (1.4% and 1.9%, respectively).

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

Unit: %

Economic activity (sections from Nace-Rev. 2)	Q1-2016			Q2-2016			Q3-2016			Q4-2016			2015			2016		
	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	0.2	0.0	2.1	2.7	0.3	2.8	3.0	2.1	1.2	1.2	1.2	1.6	1.3	2.6	1.6	1.8	0.9
B to N	-1.1	-0.7	-3.1	1.5	1.9	0.2	-0.2	-0.1	-0.6	-0.8	-0.3	-2.7	2.8	3.1	2.0	-0.1	0.2	-1.5
Industry (B to E)	0.8	1.4	-1.4	3.0	3.2	2.3	0.2	0.2	0.4	-0.1	0.0	-0.5	3.8	4.1	2.7	0.9	1.1	0.2
Construction (F)	-0.8	-0.4	-2.0	0.5	1.1	-1.7	-0.1	0.5	-2.3	-1.5	-0.9	-4.0	3.1	3.4	2.2	-0.5	0.1	-2.5
Services (G to N)	-2.4	-1.9	-4.3	0.9	1.3	-0.7	-0.4	-0.4	-0.8	-1.0	-0.3	-3.7	2.2	2.3	1.5	-0.7	-0.3	-2.4
O to S	2.1	1.6	3.3	2.8	3.8	0.4	6.4	7.1	4.6	4.3	3.7	5.9	0.1	-1.1	3.3	4.0	4.2	3.5

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

Unit: %

Economic activity (sections from Nace-Rev. 2)	Q1-2016			Q2-2016			Q3-2016			Q4-2016			2015			2016		
	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	0.2	0.0	2.1	2.7	0.3	4.3	4.5	3.7	6.2	6.2	6.2	0.8	0.5	1.8	3.3	3.5	2.6
B to N	-1.1	-0.7	-3.1	1.5	1.9	0.2	1.4	1.5	1.0	4.1	4.6	2.1	2.0	2.3	1.2	1.6	1.9	0.1
Industry (B to E)	0.8	1.4	-1.4	3.0	3.2	2.3	1.8	1.7	1.9	4.8	4.9	4.4	3.0	3.3	1.9	2.6	2.8	1.9
Construction (F)	-0.8	-0.4	-2.0	0.5	1.1	-1.7	1.5	2.1	-0.8	3.3	4.0	0.7	2.3	2.6	1.4	1.2	1.7	-0.9
Services (G to N)	-2.4	-1.9	-4.3	0.9	1.3	-0.7	1.1	1.2	0.7	3.9	4.6	1.1	1.4	1.6	0.7	0.9	1.4	-0.7
O to S	2.1	1.6	3.3	2.8	3.8	0.4	8.0	8.7	6.3	9.4	8.8	11.1	-0.8	-1.9	2.4	5.6	5.8	5.1

Source: INE, Labour Cost Index - 4th quarter of 2016.

Sections from Nace-Rev. 2

- | | |
|---|--|
| B - Mining and quarrying | K - Financial and insurance activities |
| C - Manufacturing | L - Real estate activities |
| D - Electricity, gas, steam and air conditions supply | M - Professional, scientific and technical activities |
| E - Water supply, sewerage, | N - Administrative and support service activities |
| F - Construction | O - Public administration, defence, and compulsory social security |
| G - Wholesale and retail trade; | P - Education |
| H - Transport and storage | Q - Human health and social work activities |
| I - Accommodation and food service activities | R - Arts, entertainment and recreation |
| J - Information and communication | S - Other service activities |

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

Unit: %

Economic activity (sections from Nace-Rev. 2)	Q1-2016			Q2-2016			Q3-2016			Q4-2016			2015			2016		
	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	0.9	0.6	2.1	1.7	-0.5	2.8	2.0	-0.6	1.2	2.4	0.8	1.6	1.1	-0.6	1.6	1.8	0.1
B to N	-1.1	0.9	2.1	1.5	2.0	0.4	-0.2	1.5	1.6	-0.8	1.6	2.3	2.8	2.0	-0.9	-0.1	1.5	1.6
Industry (B to E)	0.8	2.6	1.8	3.0	3.0	0.0	0.2	2.0	1.8	-0.1	2.5	2.6	3.8	2.4	-1.3	0.9	2.5	1.6
Construction (F)	-0.8	0.8	1.6	0.5	1.2	0.7	-0.1	1.3	1.3	-1.5	0.1	1.7	3.1	3.6	0.4	-0.5	0.8	1.3
Services (G to N)	-2.4	-0.1	2.4	0.9	1.6	0.6	-0.4	1.1	1.5	-1.0	1.3	2.3	2.2	1.3	-0.9	-0.7	1.0	1.7
O to S	2.1	1.0	-1.1	2.8	1.3	-1.5	6.4	2.8	-3.4	4.3	3.6	-0.9	0.1	0.0	-0.4	4.0	2.2	-1.6

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

Unit: %

Economic activity (sections from Nace-Rev. 2)	Q1-2016			Q2-2016			Q3-2016			Q4-2016			2015			2016		
	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	0.9	0.6	2.1	1.7	-0.5	4.3	2.0	-2.1	6.2	2.4	-3.9	0.8	1.1	0.1	3.3	1.8	-1.4
B to N	-1.1	0.9	2.1	1.5	2.0	0.4	1.4	1.5	0.1	4.1	1.6	-2.5	2.0	2.0	-0.1	1.6	1.5	0.0
Industry (B to E)	0.8	2.6	1.8	3.0	3.0	0.0	1.8	2.0	0.3	4.8	2.5	-2.2	3.0	2.4	-0.6	2.6	2.5	0.0
Construction (F)	-0.8	0.8	1.6	0.5	1.2	0.7	1.5	1.3	-0.2	3.3	0.1	-3.1	2.3	3.6	1.2	1.2	0.8	-0.3
Services (G to N)	-2.4	-0.1	2.4	0.9	1.6	0.6	1.1	1.1	0.0	3.9	1.3	-2.5	1.4	1.3	-0.1	0.9	1.0	0.1
O to S	2.1	1.0	-1.1	2.8	1.3	-1.5	8.0	2.8	-4.8	9.4	3.6	-5.6	-0.8	0.0	0.4	5.6	2.2	-3.2

Source: INE, Labour Cost Index - 4th quarter of 2016.

Sections from Nace-Rev. 2

- | | |
|---|--|
| B - Mining and quarrying | K - Financial and insurance activities |
| C - Manufacturing | L - Real estate activities |
| D - Electricity, gas, steam and air conditions supply | M - Professional, scientific and technical activities |
| E - Water supply, sewerage, | N - Administrative and support service activities |
| F - Construction | O - Public administration, defence, and compulsory social security |
| G - Wholesale and retail trade; | P - Education |
| H - Transport and storage | Q - Human health and social work activities |
| I - Accommodation and food service activities | R - Arts, entertainment and recreation |
| J - Information and communication | S - Other service activities |

TECHNICAL NOTE

The Labour Cost Index (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) contributed to explaining their developments.

Labour costs incurred by the employer 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
- Payment in kind

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)

The LCI is a statistical operation held on a quarterly basis through a sampling survey. Data collection with local units 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.

Data on public administration [Sections O (Public administration and defence; compulsory social security) and the public part of Sections P (Education) and Q (Human health and social work activities)] are not obtained through direct collection. These data are estimated by Statistics Portugal from data obtained, among other sources, from the Directorate-General of Budget of the Ministry of Finance. These data are subject to revisions.

The LCI is Laspeyres index.

In order to obtain more information about the LCI calculation, we recommend the consultation of 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.

In order to be in line with the series published by Eurostat, which has changed the LCI reference year from 2008 to 2012, the indices published started to have, since the LCI press release for the 1st quarter of 2015, the year 2012 as the reference year (2012=100). The back series of the indices were recalculated for the period from the 1st quarter of 2008 to the 4th quarter of 2014.

With the purpose of eliminating the effects resulting from different numbers of working days in the same 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 Portal.

(to be continued)

(continuation)

Revisions

The data published in this release concerning the last quarters are subject to revisions. These revisions result, on one side, from the inclusion of information for the last quarter sent lately by some establishments of the LCI sample and, on the other side, from updates in the data for the last quarters obtained from the Directorate-General of Budget.

The impact of those revisions, measured by the difference between the year-on-year rates of change published today and those published for the 3rd quarter of 2016 in the Press Release "Labour Cost Index – 3rd quarter of 2016", is available in the following table:

Revision of the LCI year-on-year rates of change published in the 3 rd quarter of 2016										
Economic activity (sections from Nace Rev. 2)	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 per employee	Hours actually worked per employee		Wage costs	Other costs	Average cost per employee	Hours actually worked per employee
Total (B to S)	-0.8	-0.9	-0.5	-0.3	0.5	-0.8	-1.0	-0.4	-0.3	0.5
B to N	-0.9	-0.9	-1.0	0.0	0.8	-0.8	-0.8	-0.9	0.0	0.8
Industry (B to E)	-1.0	-0.9	-1.1	0.1	1.1	-0.9	-0.9	-1.1	0.1	1.2
Construction (F)	-0.5	-0.5	-0.4	0.0	0.4	-0.5	-0.5	-0.4	0.0	0.4
Services (G to N)	-0.8	-0.9	-1.0	-0.2	0.6	-0.9	-0.8	-1.0	-0.2	0.7
O to S	-0.7	-1.0	0.0	-0.6	0.2	-0.8	-1.0	0.1	-0.6	0.2

Unit: p.p.

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 1th of February of 2017. The response rate was 95.1%.

Next Press Release: 15 May 2017.