

February, 14<sup>th</sup> 2013

Labour Cost Index  
4<sup>th</sup> quarter of 2013

**The Labour Cost Index decreased by 0.4% from the same quarter in 2012**

The Labour Cost Index adjusted for working days decreased by 0.4% in the 4<sup>th</sup> quarter of 2013, compared with the same period in 2012. In the previous quarter, it had been recorded an increase of 0.3%.

The two main labour cost items (wage costs and other costs, per hour actually worked) described a different behaviour. Wage costs decreased by 0.5% from the same period a year earlier and other costs decreased by 3.3%.

**1. Labour Cost Index and respective items**

The Labour Cost Index (LCI) recorded a decrease of 0.4% in the 4<sup>th</sup> quarter of 2013.<sup>1</sup>

LCI is a short-term indicator of the evolution of labour costs per hour actually worked (hourly labour cost) incurred by the employer. These costs include, in addition to wage costs, other labour costs incurred by the employer (see technical note on pages 7 and 8).

From yet another viewpoint, as it is an index calculated from a ratio of two items, i.e. average cost per employee and number of hours actually worked per employee (hereinafter referred to as average labour costs and hours actually worked), its evolution is determined by changes in each of these items.

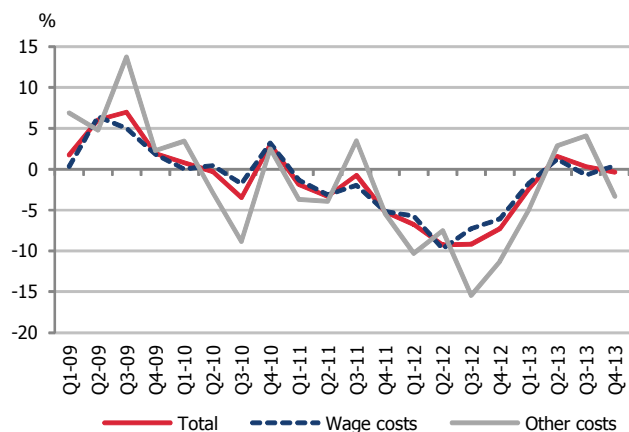
This press release analyses LCI series broken down into several items, according to the two mentioned viewpoints: 1) wage costs (per hour actually worked)

<sup>1</sup> Data analysed in this press release are adjusted for working days. Raw data, not adjusted for seasonal and working day effects, are available in the annex tables and on 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).

*versus* other costs (non-wage costs, also per hour actually worked); 2) average labour costs *versus* hours actually worked.

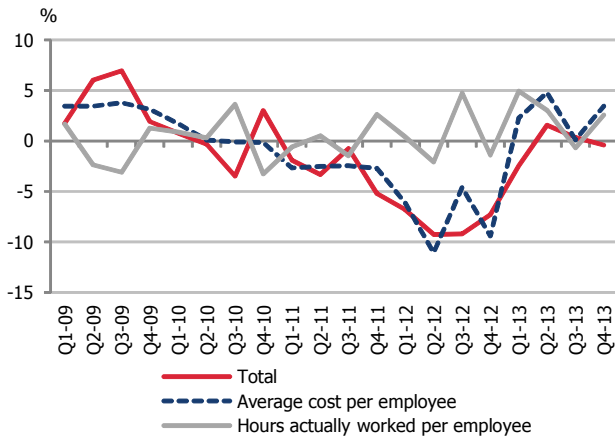
Wage costs increased by 0.5% and other costs decreased by 3.3% (Figure 1).

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



The change in the LCI also resulted from the combined effect of a 3.5% increase in the average labour costs and a 2.6% increase in the number of hours actually worked (Figure 2).

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



Since the 1<sup>st</sup> quarter of 2009, the labour cost has decelerated and gave rise to successive decreases from the 3<sup>rd</sup> quarter of 2010 up to the 4<sup>th</sup> quarter of 2012. From the 1<sup>st</sup> quarter of 2013, however, the average labour costs increased, partly due to the fact that holiday and Christmas bonuses were paid differently from the preceding year (paid monthly or at once).

For the Public Administration activities, the average labour costs increased compared to the same periods of the previous year, as in 2012 there was no payment of holiday and Christmas bonuses. This effect is particularly visible in the 4<sup>th</sup> quarter of 2013, since, apart from Christmas bonuses paid monthly, holiday bonuses were paid. Both bonuses were unpaid in 2012.

The number of hours actually worked described, in the same period (since 2009), a more irregular pattern. From the 1<sup>st</sup> quarter of 2013 onwards, the number of hours actually worked recorded substantial increases, with the exception of the 3<sup>rd</sup> quarter of 2013. In the 4<sup>th</sup> quarter of 2013, the number of hours actually worked increased by 2.6%.

## 2. Sectors of economic activity

The decrease in the LCI (of 0.4%) was also observed for the subgroup of economic activities from sections B to N<sup>2</sup> (which include, in general, the business economy or the private sector of the economy). For this group, the LCI decreased by 4.9%.

For the subgroup composed by the remaining economic activities covered by the LCI (sections O to S), which include mostly, but not exclusively, the non-business economy or the public sector of the economy, it was recorded an increase of 7.2%.

In activities from sections B to N:

- wage costs decreased by 5.4% (mainly due to the decrease in the Christmas bonus component, which, for some workers, has been paid throughout the year in 2013) and other costs decreased by 3.0% (Figure 3);
- the decrease in the LCI (of 4.9%) resulted from a decrease in the average labour costs (2.9%) and an increase in the number of hours actually worked (2.1%) (Figure 4).

In activities from sections O to S:

- wage costs increased by 11.2% (due to the monthly payment of the Christmas bonus and the payment of holiday bonus, both unpaid in 2012) and other costs decreased by 3.8%;
- the increase in the LCI (of 7.2%) resulted from an increase in the average labour costs (11.3%), which was greater than the increase in the number of hours actually worked (3.2%).

<sup>2</sup> The activities' designation is available in the annex tables.

Among the activities from sections B to N, the LCI decreased by 4.8% in industry (sections B to E), 0.4% in construction (section F), and 5.9% in services (G to N).

In industry:

- wage costs decreased by 5.0% and other costs decreased by 4.2%;
- the decrease in the LCI (of 4.8%) resulted from a decrease in the average labour costs (3.1%) and an increase in the number of hours actually worked (1.8%).

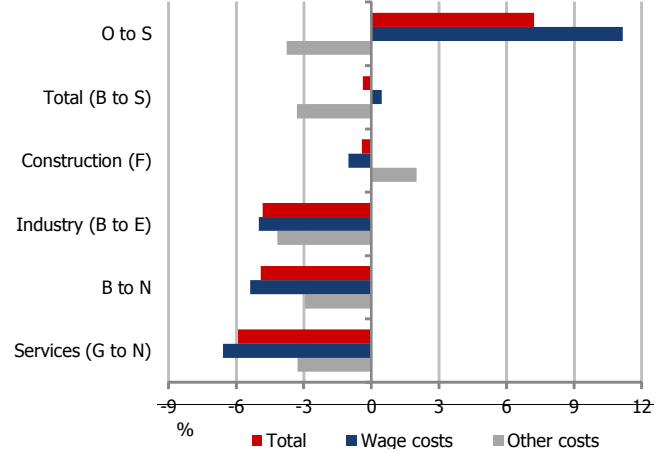
In construction:

- wage costs decreased by 1.0% and other costs increased by 2.0%;
- the decrease in the LCI (of 0.4%) resulted from a decrease in the average labour costs (1.5%) and a decrease, smaller, in the number of hours actually worked (1.1%).

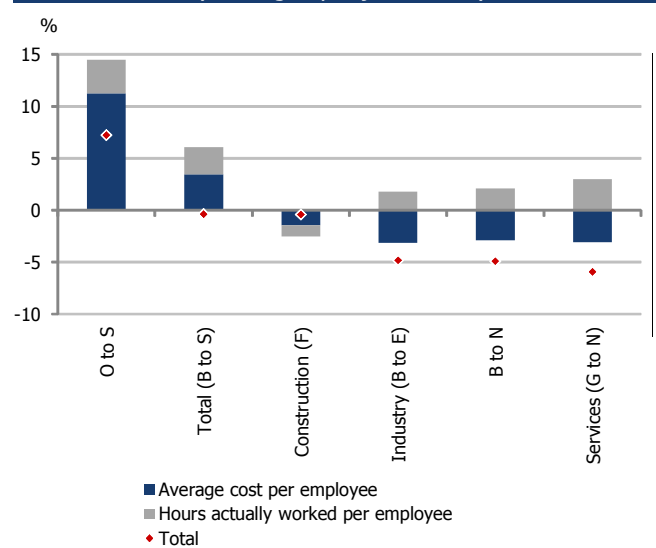
In services:

- wage costs decreased by 6.6% and other costs decreased by 3.3%;
- the decrease in the LCI (of 5.9%) resulted from a decrease in the average labour costs (3.1%) and an increase in the number of hours actually worked (3.0%).

**Figure 3: LCI year-on-year rate of change by economic activity (NACE-Rev. 2) in the 4<sup>th</sup> quarter of 2013 (working day adjusted data)**



**Figure 4: LCI year-on-year rate of change by economic activity (NACE-Rev. 2) in the 4<sup>th</sup> quarter of 2013 (working day adjusted data)**



### 3. Comparison with the European Union

Figure 5 shows the rates of change of the LCI, by country, for the last quarter available (3<sup>rd</sup> quarter of 2013), as published by Eurostat in the 17<sup>th</sup> of December of 2013.

The LCI rate of change for the European Union (28 countries) was 1.0%, in the 3<sup>rd</sup> quarter of 2013.

In fifteen countries, the LCI rates of increase were larger than the European Union average, with Estonia recording the largest one (8.1%).

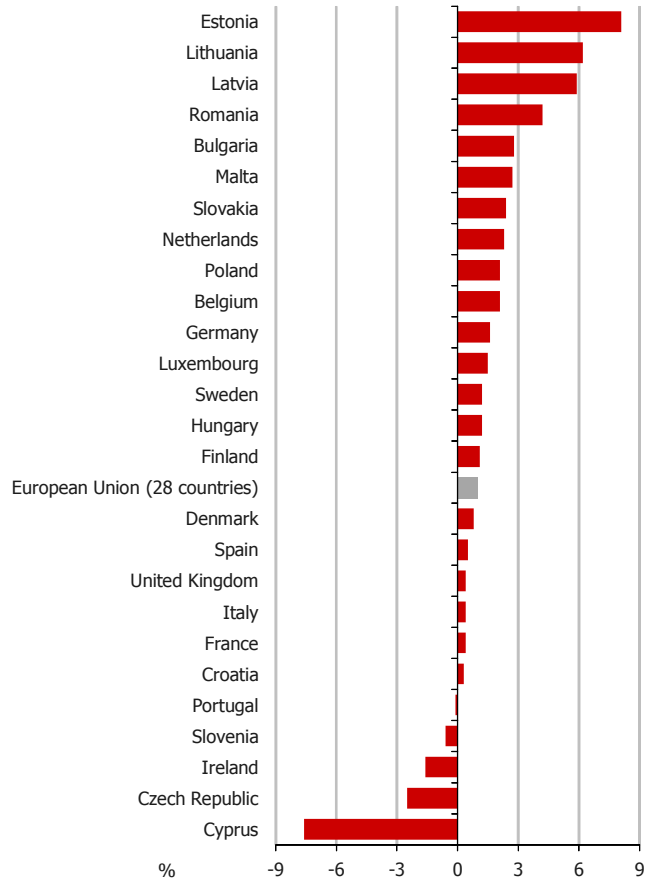
In six countries, the LCI rates of increase were smaller than the European Union average, whose values ranged from 0.3% (Croatia) to 0.8% (Denmark).

In five countries, there were recorded LCI decreases, whose rates ranged from -0.1% (Portugal<sup>3</sup>) to -7.6% (Cyprus).

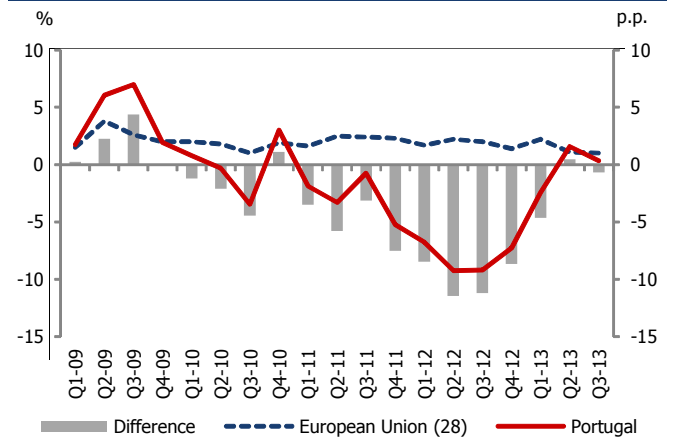
Figure 6 shows the developments in the LCI rates of change in Portugal and in the European Union, from the 1<sup>st</sup> quarter of 2009 to the 3<sup>rd</sup> quarter of 2013.

Its analysis shows that the LCI in Portugal recorded globally lower changes than those observed, on average, for the European Union (28 countries) since the 1<sup>st</sup> quarter of 2010. Those changes gave rise to successive decreases since the 1<sup>st</sup> quarter of 2011 until the 1<sup>st</sup> quarter of 2013.

**Figure 5: LCI year-on-year rate of change by European Union Country (28) in the 3<sup>rd</sup> quarter of 2013 (working day adjusted data)**



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



<sup>3</sup> The rate of change for Portugal was now revised into +0.3% (as described in the technical note, page 8).

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

Unit: %

Economic activity (sections from Nace-Rev. 2)	Q4-2012			Q1-2013			Q2-2013			Q3-2013			Q4-2013		
	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
<b>Total (B to S)</b>	<b>-7.3</b>	<b>-6.1</b>	<b>-11.3</b>	<b>-2.4</b>	<b>-1.7</b>	<b>-5.0</b>	<b>1.6</b>	<b>1.2</b>	<b>2.9</b>	<b>0.3</b>	<b>-0.7</b>	<b>4.1</b>	<b>-0.4</b>	<b>0.5</b>	<b>-3.3</b>
B to N	-0.5	1.3	-7.2	-1.6	-1.2	-2.9	1.3	0.4	4.8	-1.5	-2.7	3.3	-4.9	-5.4	-3.0
Industry (B to E)	-2.9	-1.7	-7.3	-2.4	-1.7	-5.3	0.9	-0.2	5.6	-3.6	-4.8	1.3	-4.8	-5.0	-4.2
Construction (F)	0.8	2.0	-3.9	1.0	0.3	3.8	5.0	4.0	8.9	1.5	0.1	6.8	-0.4	-1.0	2.0
Services (G to N)	0.7	3.1	-7.7	-1.6	-1.3	-2.9	0.8	0.1	3.5	-0.8	-2.0	3.8	-5.9	-6.6	-3.3
O to S	-16.8	-17.1	-16.0	-3.7	-2.5	-7.5	1.9	2.5	0.4	2.9	2.3	5.0	7.2	11.2	-3.8

**Table 2: Labour Cost Index (LCI) year-on-year rate of change by component and economic activity (NACE-Rev. 2)  
(not working day adjusted data)**

Unit: %

Economic activity (sections from Nace-Rev. 2)	Q4-2012			Q1-2013			Q2-2013			Q3-2013			Q4-2013		
	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
<b>Total (B to S)</b>	<b>-10.2</b>	<b>-9.1</b>	<b>-14.1</b>	<b>2.4</b>	<b>3.1</b>	<b>-0.3</b>	<b>3.2</b>	<b>2.9</b>	<b>4.5</b>	<b>-1.2</b>	<b>-2.2</b>	<b>2.5</b>	<b>-1.9</b>	<b>-1.1</b>	<b>-4.8</b>
B to N	-3.7	-1.9	-10.1	3.3	3.6	1.9	3.0	2.1	6.6	-3.0	-4.2	1.7	-6.4	-6.9	-4.5
Industry (B to E)	-5.9	-4.8	-10.3	2.4	3.1	-0.6	2.6	1.4	7.3	-5.1	-6.2	-0.3	-6.3	-6.5	-5.7
Construction (F)	-2.4	-1.2	-7.0	6.0	5.3	8.9	6.7	5.7	10.7	-0.1	-1.4	5.2	-2.0	-2.6	0.4
Services (G to N)	-2.5	-0.2	-10.7	3.2	3.6	1.9	2.4	1.7	5.2	-2.3	-3.5	2.2	-7.4	-8.0	-4.8
O to S	-19.5	-19.7	-18.6	1.0	2.3	-3.0	3.6	4.1	2.1	1.4	0.7	3.4	5.6	9.4	-5.3

Source: INE, Labour Cost Index - 4<sup>th</sup> quarter of 2013.

**Sections from Nace-Rev. 2**

- |   |  |
|---|--|
| B - Mining and quarrying                              | L - Real estate activities   |
| C - Manufacturing                                     | M - Professional, scientific and technical activities              |
| D - Electricity, gas, steam and air conditions supply | N - Administrative and support service activities                  |
| E - Water supply, sewerage,                           | 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                                       |
| K - Financial and insurance activities                |  |

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

Unit: %

Economic activity (sections from Nace-Rev. 2)	Q4-2012			Q1-2013			Q2-2013			Q3-2013			Q4-2013		
	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
<b>Total (B to S)</b>	<b>-7.3</b>	<b>-9.4</b>	<b>-1.4</b>	<b>-2.4</b>	<b>2.3</b>	<b>4.9</b>	<b>1.6</b>	<b>4.8</b>	<b>3.1</b>	<b>0.3</b>	<b>0.1</b>	<b>-0.7</b>	<b>-0.4</b>	<b>3.5</b>	<b>2.6</b>
B to N	-0.5	-3.1	-2.5	-1.6	4.0	5.7	1.3	4.8	3.3	-1.5	-1.0	0.1	-4.9	-2.9	2.1
Industry (B to E)	-2.9	-2.0	0.9	-2.4	3.1	5.6	0.9	4.3	3.0	-3.6	-1.9	1.6	-4.8	-3.1	1.8
Construction (F)	0.8	0.2	-0.6	1.0	5.3	4.2	5.0	7.3	2.2	1.5	0.2	-1.3	-0.4	-1.5	-1.1
Services (G to N)	0.7	-4.5	-5.1	-1.6	4.3	6.0	0.8	4.6	3.7	-0.8	-0.8	-0.5	-5.9	-3.1	3.0
O to S	-16.8	-17.1	0.0	-3.7	0.3	4.1	1.9	4.8	2.8	2.9	1.6	-1.6	7.2	11.3	3.2

**Table 4: Labour Cost Index (LCI) year-on-year rate of change by source of variation and economic activity (NACE-Rev. 2)  
(not working day adjusted data)**

Unit: %

Economic activity (sections from Nace-Rev. 2)	Q4-2012			Q1-2013			Q2-2013			Q3-2013			Q4-2013		
	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
<b>Total (B to S)</b>	<b>-10.2</b>	<b>-9.4</b>	<b>1.8</b>	<b>2.4</b>	<b>2.3</b>	<b>0.0</b>	<b>3.2</b>	<b>4.8</b>	<b>1.4</b>	<b>-1.2</b>	<b>0.1</b>	<b>0.9</b>	<b>-1.9</b>	<b>3.5</b>	<b>4.2</b>
B to N	-3.7	-3.1	0.7	3.3	4.0	0.7	3.0	4.8	1.6	-3.0	-1.0	1.7	-6.4	-2.9	3.7
Industry (B to E)	-5.9	-2.0	4.3	2.4	3.1	0.7	2.6	4.3	1.3	-5.1	-1.9	3.1	-6.3	-3.1	3.4
Construction (F)	-2.4	0.2	2.6	6.0	5.3	-0.7	6.7	7.3	0.5	-0.1	0.2	0.3	-2.0	-1.5	0.5
Services (G to N)	-2.5	-4.5	-2.0	3.2	4.3	1.0	2.4	4.6	2.0	-2.3	-0.8	1.0	-7.4	-3.1	4.6
O to S	-19.5	-17.1	3.3	1.0	0.3	-0.8	3.6	4.8	1.2	1.4	1.6	-0.1	5.6	11.3	4.9

Source: INE, Labour Cost Index - 4<sup>th</sup> quarter of 2013.

**Sections from Nace-Rev. 2**

- |   |  |
|---|--|
| B - Mining and quarrying                              | L - Real estate activities   |
| C - Manufacturing                                     | M - Professional, scientific and technical activities              |
| D - Electricity, gas, steam and air conditions supply | N - Administrative and support service activities                  |
| E - Water supply, sewerage, waste                     | O - Public administration, defence, and compulsory social security |
| G - Wholesale and retail trade; repair of             | 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                                       |
| K - Financial and insurance 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 CAE-Rev. 3.

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 for this statistical operation, which is available (in Portuguese) at <http://smi.ine.pt/DocumentacaoMetodologica/Detalhes/1064>.

## 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 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 seasonal and working day effects, are available in the annex tables and on the Official Statistics Portal.

*(to be continued)*

(continued)

## 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 as published for the 3<sup>rd</sup> quarter of 2013 in the Press Release "Labour Cost Index – 3<sup>rd</sup> quarter of 2013" and those published today, is available in the following table:

Revision of the LCI year-on-year rates of change published in the 3 <sup>rd</sup> quarter of 2013										
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 em ployee	Hours actually worked per employee
<b>Total (B to S)</b>	<b>0.5</b>	<b>-0.5</b>	<b>3.9</b>	<b>0.6</b>	<b>0.1</b>	<b>0.4</b>	<b>-0.5</b>	<b>3.8</b>	<b>0.6</b>	<b>0.1</b>
B to N	-0.1	-0.2	0.1	0.0	0.2	-0.1	-0.2	0.1	0.0	0.2
Industry (B to E)	-0.1	-0.2	0.2	0.0	0.1	-0.1	-0.2	0.2	0.0	0.1
Construction (F)	0.8	0.8	0.4	1.4	0.6	0.7	0.8	0.4	1.4	0.6
Services (G to N)	-0.4	-0.5	0.0	-0.2	0.1	-0.4	-0.5	0.0	-0.2	0.2
O to S	1.3	-0.9	8.0	1.4	0.1	1.3	-0.9	7.9	1.4	0.1

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 30<sup>th</sup> of January of 2014. The response rate was 85.7%.