

May, 16<sup>th</sup> 2011

## Labour Cost Index

1<sup>st</sup> quarter of 2011

**In the 1<sup>st</sup> quarter of 2011, the Labour Cost Index increased by 0.9%, compared to the 1<sup>st</sup> quarter of 2010**

In the 1<sup>st</sup> quarter of 2011, the Labour Cost Index (LCI) working day adjusted, excluding Public Administration, increased by 0.9% compared to the same period of the previous year (it was -0.1 % in the 1<sup>st</sup> quarter of 2010).

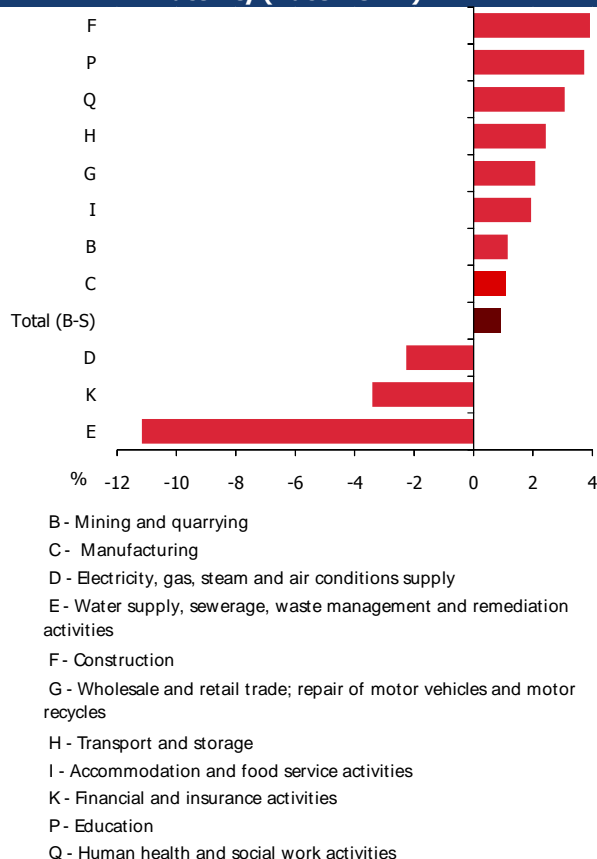
In the 1<sup>st</sup> quarter of 2011, the Labour Cost Index (LCI)<sup>1</sup> increased by 0.9%. This rate of change resulted from an increase in the average labour costs (0.9%) and from a decrease in the number of hours actually worked (0.4%).

### 1. Economic activity

In the 1<sup>st</sup> quarter of 2011, the LCI increased in the majority of economic activities compared to the same quarter of 2010.

All activities that recorded increases presented LCI year-on-year rates that were larger than the global rate (0.9%): "Construction" (3.9%), "Education" (3.7%), "Human health and social work activities" (3.1%), "Transport and storage" (2.4%), "Wholesale and retail trade; repair of motor vehicles and motor cycles" (2.1%), "Accommodation and food service activities" (1.9%), "Mining and quarrying" (1.2%), and "Manufacturing (1.1%).

**Figure 1: LCI year-on-year rate of change by economic activity (Nace-Rev. 2)**



<sup>1</sup> The indices report to the reference year of 2008. The data exclude Public Administration and are adjusted for working days.

Comparing with the same quarter of the previous year, negative variations were registered in the activities “Electricity, gas, steam and air conditions supply” (2.3%), “Financial and insurance activities” (3.4%), and “Water supply, sewerage, waste management and remediation activities” (11.2%).

**Table 1: Year-on-year rate of change of average labour cost, hours actually worked by worker and LCI by economic activity (Nace-Rev.2)**

Economic activity (Nace-Rev. 2)	Average labour cost by worker	Hours actually worked by worker	Unit: %
			Labour Cost Index (LCI)
Total (B-S)	<b>0.6</b>	<b>-0.4</b>	<b>0.9</b>
Of which:			
B - Mining and quarrying	-0.4	-1.6	1.2
C - Manufacturing	2.1	1.0	1.1
D - Electricity, gas, steam and air conditions supply	4.2	6.6	-2.3
E - Water supply, sewerage, waste management and remediation activities	-7.7	3.9	-11.2
F - Construction	2.3	-1.6	3.9
G - Wholesale and retail trade; repair of motor vehicles and motor recycles	-2.2	-4.2	2.1
H - Transport and storage	0.8	-1.6	-2.0
I - Accommodation and food service activities	-2.3	-4.1	0.4
K - Financial and insurance activities	0.1	3.6	-1.3
P - Education	2.1	-1.6	-0.5
Q - Human health and social work activities	1.4	-1.6	2.1

Source: INE, Labour Cost Index and Employment Statistics - 1<sup>st</sup> quarter of 2011.

In “Construction”, “Education”, “Human health and social work activities”, and “Transport and storage”, the year-on-year rates of increase was explained by an increase in the average labour costs and by a decrease in the number of hours actually worked.

The rate of increase in “Wholesale and retail trade; repair of motor vehicles and motor recycles”, “Accommodation and food service activities”, and “Mining and quarrying” was justified by a decrease in

the average labour costs and by a decrease in a large amount, in the number of hours actually worked.

In “Manufacturing”, the increase of the rate of change was due to an increase in both the average labour costs and the number of workers, the former being larger than the latter.

The year-on-year rate of decrease in “Electricity, gas, steam and air conditions supply” and “Financial and insurance activities” resulted from an increase in both, the average labour costs and the number of hours actually worked, the latter being larger than the former.

In “Water supply, sewerage, waste management and remediation activities”, the LCI rate of decrease was justified by a decrease in the average labour costs and an increase in the number of hours actually worked.

## 2. Regions NUTS II

In the 1<sup>st</sup> quarter of 2011, *Região Autónoma dos Açores*, *Algarve*, *Região Autónoma da Madeira* and *Lisboa* presented LCI year-on-year rates of increase that were larger than the overall average (0.9%), of 6.9%, 5.3%, 2.8% and 2.3%, respectively.

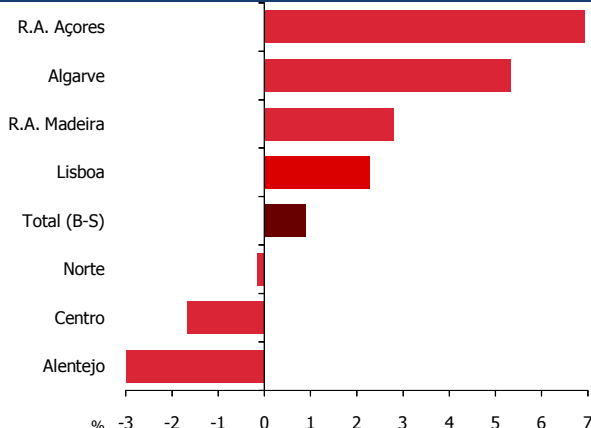
*Norte*, *Centro* and *Alentejo* recorded LCI year-on-year rates of decrease, of 0.1%, 1.7% and 3.0%, respectively.

In *Região Autónoma dos Açores* and *Lisboa*, the rate of change was explained by an increase in the average labour costs and by a decrease in the number of hours worked.

The LCI year-on-year rate of increase in *Algarve* resulted from a decrease in both the average labour

costs and the number of hours actually worked, the latter being larger than the former.

**Figure 2: LCI year-on-year rate of change by region NUTS II (2002)**



In *Região Autónoma da Madeira*, the LCI year-on-year rate of increase was due to an increase in both the average labour costs and the number of workers, the former being larger than the latter.

The year-on-year rate of decrease in *Norte* was explained by a decrease in both the average labour costs and the number of hours actually worked, the former being larger.

**Table 2: Year-on-year rate of change of average labour cost, hours actually worked by worker and LCI by region NUTS II (2002)**

Unit: %

NUTS II (2002)	Average labour cost by worker	Hours actually worked by worker	Labour Cost Index (LCI)
Total (B-S)	0.6	-0.4	0.9
Norte	-1.9	-1.8	-0.1
Centro	-0.4	1.0	-1.7
Lisboa	0.9	-1.2	2.3
Alentejo	-1.1	2.0	-3.0
Algarve	-0.5	-5.5	5.3
R.A. Açores	1.2	-5.4	6.9
R.A. Madeira	4.3	1.8	2.8

**Source:** INE, Labour Cost Index and Employment Statistics - 1<sup>st</sup> quarter of 2011.

In *Centro* and *Alentejo*, the increase of the LCI rate of change was justified by a decrease in the average labour costs and an increase in the number of hours actually worked.

### 3. Occupational groups<sup>2</sup>

In the 1<sup>st</sup> quarter of 2011, in the following occupational groups, the LCI year-on-year rates of increase were larger than the overall rate (0.9%): "Clerical support workers" (5.9%), "Skilled agricultural, forestry and fishery workers" (5.7%), "Elementary occupations" (4.2%), "Service and sales workers" (3.3%), "Technicians and associate professionals" (1.0%), and "Craft and related trade workers" (1.0%).

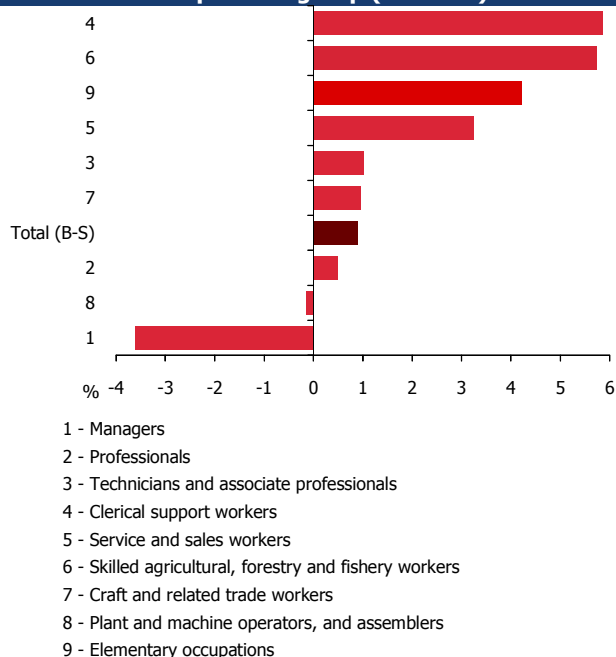
The occupational group "Professionals" recorded LCI year-on-year rate of increase that was smaller than the overall rate, of 0.5%.

Comparing with the same quarter of the previous year, negative variations were registered in "Plant and machine operators, and assemblers" (0.2%) and "Managers" (3.6%).

The LCI year-on-year rate of increase in "Clerical support workers", "Skilled agricultural, forestry and fishery workers", "Elementary occupations", "Service and sales workers", and "Technicians and associate professionals" resulted from an increase in the average labour costs and by a decrease in the number of hours actually worked.

<sup>2</sup> In the 1<sup>st</sup> quarter of 2011, the ISCO-08 was adopted in LCI and LFS. In order to allow the calculation of variations, Statistics Portugal carried out an exercise of back series calculations for the LCI components according the ISCO-08, using, among other elements, the equivalence tables between the two classifications (ISCO-08 and ISCO-88).

**Figure 3: LCI year-on-year rate of change by occupational group (ISCO-08)**



In "Craft and related trade workers" and "Professionals", the LCI year-on-year rate of increase was due to an increase in both the average labour costs and the number of workers, the former being larger than the latter.

**Table 3: Year-on-year rate of change of average labour cost, hours actually worked by worker and LCI by occupational group (ISCO-08)**

Occupational groups (ISCO-08)	Average labour cost by worker	Hours actually worked by worker	Unit: %
			Labour Cost Index (LCI)
<b>Total (B-S)</b>	<b>0.6</b>	<b>-0.4</b>	<b>0.9</b>
Managers	-5.3	-1.9	-3.6
Professionals	0.5	0.2	0.5
Technicians and associate professionals	0.8	-0.1	1.0
Clerical support workers	1.1	-4.6	5.9
Service and sales workers	2.1	-1.2	3.3
Skilled agricultural, forestry and fishery workers	0.2	-5.2	5.7
Craft and related trade workers	1.7	1.0	1.0
Plant and machine operators, and assemblers	0.5	0.7	-0.2
Elementary occupations	1.9	-1.9	4.2

Source: INE, Labour Cost Index and Employment Statistics -1<sup>st</sup> quarter of 2011.

The LCI year-on-year rate of decrease in "Plant and machine operators, and assemblers" was generated by an increase in both the average labour costs and the number of hours actually worked, the latter being larger.

In "Managers", the LCI year-on-year rate of decrease was due to a decrease in both the average labour costs and the number of hours worked, the former being larger.

#### 4. International comparison

Figure 4 presents the year-on-year rates of change of the LCI, by country, for the last quarter available (4<sup>th</sup> quarter of 2010)<sup>3</sup> for the whole economy (B to N), published by Eurostat under the title "LCI – Labour Cost Index", in the 16<sup>th</sup> of March of 2011.

In the 4<sup>th</sup> quarter of 2010, the LCI year-on-year rate of change for the European Union (27 countries) was 2.0%. In Portugal the rate was 4.2%.

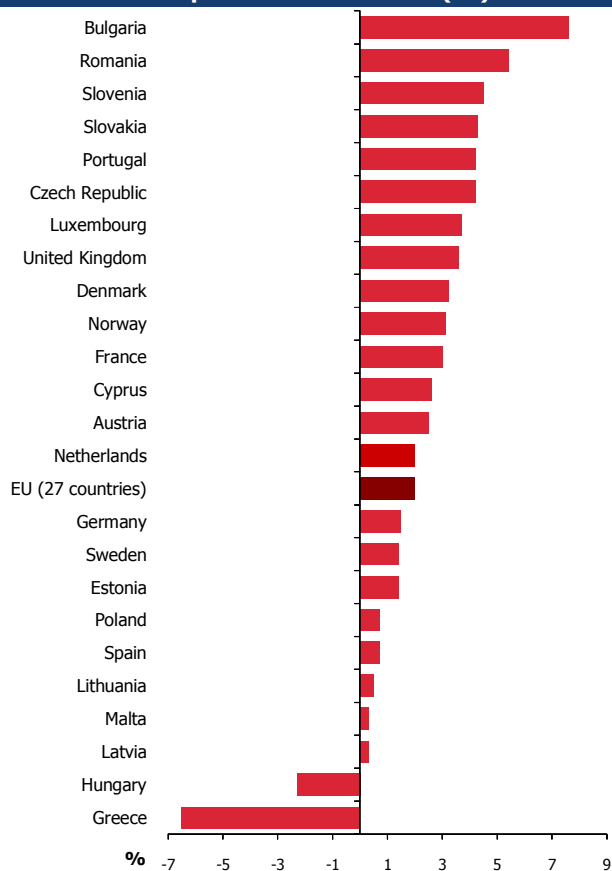
In fourteen countries the rates of increase were larger than the European Union average. Bulgaria recorded a LCI rate of increase (7.6%) that was larger, at least three times, than the registered for the European Union.

In eight countries the rates of increase were smaller than the European Union average, which rates were between 0.3% (Malta and Latvia) and 1.5% (Germany).

Hungary and Greece recorded decreases in the LCI, of 2.3% and 6.5%, respectively.

<sup>3</sup> Provisional data for the United Kingdom, Portugal, Sweden, Spain, Netherlands, Latvia, Slovenia, Hungary, Romania, Slovakia, Austria, Bulgaria, and Malta.

**Figure 4: LCI year-on-year rate of change (B-N) in European Union countries (27)**



**Table 4: Labour Cost Index (LCI) by economic activity, region NUTS II and occupational group (2008=100)**

Unit: 2008=100

	2008Q1	2008Q2	2008Q3	2008Q4	2008	2009Q1	2009Q2	2009Q3	2009Q4	2009	2010Q1	2010Q2	2010Q3	2010Q4	2010	2011Q1
<b>By economic activities (Nace-Rev. 2)</b>																
Total (B_S, excluding public administration)	86.6	87.5	112.4	113.5	100.0	88.8	91.7	117.9	114.7	103.3	88.7	92.9	117.4	119.4	104.6	89.5
Total (B_N)	86.7	87.5	112.2	113.6	100.0	89.0	91.8	117.7	114.8	103.3	88.8	92.9	117.6	119.6	104.7	89.6
B - Mining and quarrying	86.8	90.9	107.9	114.4	100.0	91.1	96.6	118.7	120.8	106.8	92.7	95.9	120.7	126.2	108.9	93.8
C - Manufacturing	83.0	85.5	118.7	112.8	100.0	85.8	91.3	123.3	113.1	103.4	85.2	92.4	126.1	119.2	105.7	86.2
D - Electricity, gas, steam and air conditions supply	78.7	116.5	97.5	107.3	100.0	85.5	125.7	101.1	112.4	106.2	92.2	120.9	98.5	125.5	109.3	90.1
E - Water supply, sewerage, waste management and remediation activities	85.3	88.2	104.9	121.6	100.0	92.0	99.3	111.7	120.3	105.8	88.5	85.2	103.8	115.7	98.3	78.6
F - Construction	84.7	88.1	109.9	117.3	100.0	86.3	92.3	114.6	123.1	104.0	88.6	96.4	117.6	130.5	108.3	92.0
G - Wholesale and retail trade; repair of motor vehicles and motor recycles	88.5	88.0	110.2	113.3	100.0	87.4	92.2	114.8	114.7	102.3	88.1	90.9	115.4	117.2	102.9	90.0
H - Transport and storage	83.8	89.0	115.7	111.6	100.0	89.0	95.0	126.1	114.0	106.0	87.3	96.0	123.8	119.1	106.6	89.4
I - Accommodation and food service activities	86.2	84.7	113.3	115.7	100.0	88.4	85.4	117.7	117.0	102.1	88.7	91.1	110.1	114.6	101.1	90.4
K - Financial and insurance activities	102.5	88.8	94.8	113.9	100.0	105.0	84.4	104.6	109.3	100.8	103.6	86.6	99.5	119.8	102.4	100.1
P - Education (excluding public administration)	80.7	81.6	132.4	105.2	100.0	77.9	88.0	138.2	106.7	102.7	77.4	86.1	130.8	112.9	101.8	80.3
Q - Human health and social work activities (excluding public administration)	81.5	92.9	110.8	114.8	100.0	82.7	95.8	117.3	115.5	102.8	84.4	99.3	112.5	116.8	103.3	87.0
<b>By region NUTS II (2002) (B_S, excluding public administration)</b>																
101 - Norte	86.9	86.1	112.6	114.4	100.0	88.6	89.1	116.8	114.0	102.1	87.8	89.3	118.1	118.5	103.4	87.7
106 - Centro	87.3	89.0	111.0	112.8	100.0	89.0	91.7	114.2	114.3	102.3	89.2	94.1	116.5	116.5	104.1	87.8
107 - Lisboa	86.2	87.1	113.9	112.8	100.0	87.6	90.8	116.5	110.9	101.4	86.8	90.9	114.1	114.9	101.7	88.8
108 - Alentejo	86.1	89.1	108.5	116.3	100.0	90.0	94.3	115.5	116.9	104.2	90.1	95.3	116.1	122.2	105.9	87.3
109 - Algarve	85.2	90.3	108.6	116.0	100.0	88.5	96.0	116.9	119.7	105.3	89.0	96.5	113.7	116.2	103.9	93.7
201 - R.A. Açores	84.7	88.1	112.1	115.1	100.0	87.0	90.6	117.0	113.6	102.1	88.4	94.4	116.7	120.4	105.0	94.6
301 - R.A. Madeira	90.5	85.2	108.3	116.1	100.0	92.8	94.9	119.8	120.9	107.1	95.2	100.9	124.8	128.6	112.4	97.9
<b>By occupational group (ISCO-08) (B_S, excluding public administration)</b>																
1 - Managers	92.4	87.6	107.6	112.3	100.0	97.7	91.3	116.2	114.8	105.0	95.4	89.6	111.6	117.3	103.5	92.0
2 - Professionals	84.9	90.6	112.7	111.8	100.0	85.4	93.2	121.4	115.1	103.8	85.8	94.1	116.2	117.3	103.3	86.2
3 - Technicians and associate professionals	87.8	87.1	111.9	113.1	100.0	88.3	91.0	114.6	114.6	102.1	87.1	90.7	116.4	118.4	103.2	88.0
4 - Clerical support workers	85.3	88.7	112.0	114.0	100.0	85.8	91.0	117.8	114.7	102.3	85.8	92.2	119.0	118.6	103.9	90.9
5 - Service and sales workers	82.2	89.1	110.7	117.9	100.0	88.0	90.0	115.1	118.8	103.0	88.8	96.1	117.0	121.5	105.9	91.7
6 - Skilled agricultural, forestry and fishery workers	85.5	92.8	110.1	111.7	100.0	82.5	91.7	116.0	119.6	102.5	86.4	92.1	117.6	125.9	105.5	91.4
7 - Craft and related trade workers	82.1	87.8	114.8	115.3	100.0	87.2	95.2	122.1	116.6	105.3	87.1	95.0	119.7	121.4	105.8	87.9
8 - Plant and machine operators, and assemblers	82.6	87.0	116.0	114.5	100.0	84.8	91.2	116.9	115.2	102.0	85.7	92.1	118.1	117.8	103.4	85.5
9 - Elementary occupations	84.2	88.2	110.9	116.6	100.0	85.6	93.6	115.7	117.7	103.1	87.4	97.4	118.8	122.0	106.4	91.1

**Source:** INE, Labour Cost Index and Employment Statistics - 1<sup>st</sup> quarter of 2011.

**Note:** The series are working day adjusted.

**Table 5: Year-on-year rate of change by economic activity, region NUTS II and occupational group**

	2008Q1	2008Q2	2008Q3	2008Q4	2008	2009Q1	2009Q2	2009Q3	2009Q4	2009	2010Q1	2010Q2	2010Q3	2010Q4	2010	2011Q1	Unit: %
<b>By economic activities (Nace-Rev. 2)</b>																	
Total (B_S, excluding public administration)	3.8	3.1	5.3	4.5	4.3	2.5	4.8	4.8	1.1	3.3	-0.1	1.3	-0.4	4.1	1.3	0.9	
Total (B_N)	3.6	3.1	5.5	4.6	4.3	2.7	4.8	5.0	1.0	3.3	-0.2	1.3	-0.1	4.2	1.4	0.8	
B - Mining and quarrying	-0.9	-3.3	-1.8	-4.0	-2.6	5.0	6.2	9.9	5.6	6.8	1.8	-0.7	1.7	4.5	2.0	1.2	
C - Manufacturing	3.1	0.5	5.2	0.9	2.5	3.4	6.9	3.9	0.2	3.4	-0.7	1.2	2.3	5.4	2.3	1.1	
D - Electricity, gas, steam and air conditions supply	-5.5	4.0	-1.4	5.8	1.1	8.6	8.0	3.7	4.7	6.2	7.8	-3.9	-2.6	11.7	2.9	-2.3	
E - Water supply, sewerage, waste management and remediation activities	0.0	0.0	0.0	0.0	0.0	7.8	12.6	6.5	-1.1	5.8	-3.8	-14.2	-7.1	-3.8	-7.1	-11.2	
F - Construction	3.0	4.4	2.6	5.4	3.9	1.9	4.7	4.2	4.9	4.0	2.6	4.5	2.7	6.0	4.1	3.9	
G - Wholesale and retail trade; repair of motor vehicles and motor recycles	3.3	4.3	5.1	6.1	4.8	-1.2	4.7	4.2	1.3	2.3	0.8	-1.4	0.5	2.2	0.6	2.1	
H - Transport and storage	2.5	3.6	8.8	5.2	5.3	6.3	6.7	9.0	2.2	6.0	-2.0	1.1	-1.8	4.4	0.5	2.4	
I - Accommodation and food service activities	-0.3	0.6	4.9	4.4	2.7	2.5	0.8	3.9	1.1	2.1	0.4	6.7	-6.5	-2.1	-1.0	1.9	
K - Financial and insurance activities	4.6	7.7	16.7	15.0	10.9	2.4	-4.9	10.3	-4.0	0.8	-1.3	2.7	-4.8	9.6	1.6	-3.4	
P - Education (excluding public administration)	10.5	1.4	0.4	-0.1	2.4	-3.6	7.8	4.3	1.4	2.7	-0.5	-2.1	-5.4	5.8	-0.8	3.7	
Q - Human health and social work activities (excluding public administration)	4.0	3.1	1.8	-1.0	1.7	1.4	3.1	5.8	0.7	2.8	2.1	3.7	-4.1	1.1	0.4	3.1	
<b>By region NUTS II (2002) (B_S, excluding public administration)</b>																	
101 - Norte	4.7	3.2	4.1	3.9	4.0	1.9	3.4	3.7	-0.3	2.1	-0.8	0.2	1.1	3.9	1.3	-0.1	
106 - Centro	4.4	3.5	3.2	4.7	4.0	2.1	3.0	2.9	1.4	2.3	0.2	2.6	2.0	1.9	1.7	-1.7	
107 - Lisboa	3.0	2.5	9.6	5.1	5.3	1.6	4.2	2.3	-1.7	1.4	-0.9	0.2	-2.1	3.6	0.2	2.3	
108 - Alentejo	-1.6	-3.0	3.1	-0.9	-0.5	4.5	5.8	6.5	0.5	4.2	0.1	1.1	0.5	4.6	1.7	-3.0	
109 - Algarve	0.0	1.4	6.4	2.5	2.7	4.0	6.3	7.7	3.2	5.3	0.5	0.6	-2.7	-2.9	-1.3	5.3	
201 - R.A. Açores	3.0	2.3	6.2	3.7	3.9	2.8	2.8	4.3	-1.3	2.1	1.6	4.2	-0.3	6.0	2.9	6.9	
301 - R.A. Madeira	11.0	-2.3	2.1	1.2	2.7	2.5	11.4	10.6	4.2	7.1	2.6	6.4	4.2	6.4	5.0	2.8	
<b>By occupational group (ISCO-08) (B_S, excluding public administration)</b>																	
1 - Managers	4.3	9.5	4.9	12.1	7.7	5.8	4.2	7.9	2.2	5.0	-2.4	-1.9	-4.0	2.2	-1.5	-3.6	
2 - Professionals	4.2	6.3	3.4	1.8	3.8	0.7	2.8	7.7	3.0	3.8	0.4	1.0	-4.3	1.9	-0.4	0.5	
3 - Technicians and associate professionals	3.9	3.0	9.6	5.0	5.5	0.5	4.4	2.5	1.3	2.1	-1.3	-0.3	1.5	3.3	1.0	1.0	
4 - Clerical support workers	3.5	3.7	5.6	4.1	4.3	0.5	2.7	5.2	0.6	2.3	0.1	1.3	1.0	3.5	1.6	5.9	
5 - Service and sales workers	4.2	4.9	10.4	4.9	6.2	7.0	1.0	4.0	0.8	3.0	1.0	6.7	1.6	2.3	2.8	3.3	
6 - Skilled agricultural, forestry and fishery workers	3.1	10.2	-1.9	1.6	2.8	-3.5	-1.1	5.4	7.1	2.5	4.8	0.4	1.4	5.3	3.0	5.7	
7 - Craft and related trade workers	1.0	2.1	3.5	3.6	2.7	6.2	8.4	6.4	1.1	5.3	-0.2	-0.2	-2.0	4.1	0.4	1.0	
8 - Plant and machine operators, and assemblers	1.7	2.7	7.8	6.2	4.9	2.8	4.9	0.8	0.7	2.0	1.0	1.0	1.0	2.3	1.3	-0.2	
9 - Elementary occupations	4.6	7.3	7.2	6.9	6.6	1.7	6.1	4.3	1.0	3.1	2.0	4.1	2.7	3.6	3.1	4.2	

**Source:** INE, Labour Cost Index and Employment Statistics - 1<sup>st</sup> quarter of 2011.

**Note:** The series are working day adjusted.

**Table 6: Labour Cost Index (LCI) by economic activity, region NUTS II and occupational group (2008=100)**

Unit: 2008=100

	2008Q1	2008Q2	2008Q3	2008Q4	2008	2009Q1	2009Q2	2009Q3	2009Q4	2009	2010Q1	2010Q2	2010Q3	2010Q4	2010	2011Q1
<b>By economic activities (Nace-Rev. 2)</b>																
Total (B_S, excluding public administration)	90.0	89.6	111.5	108.8	100.0	92.3	92.4	115.1	111.8	102.9	92.2	92.0	114.7	116.4	103.8	91.6
Total (B_N)	90.2	89.6	111.2	109.0	100.0	92.5	92.4	115.0	111.9	103.0	92.4	92.1	114.8	116.6	104.0	91.7
B - Mining and quarrying	90.2	93.1	107.0	109.7	100.0	94.7	97.2	115.9	117.7	106.4	96.4	95.1	117.9	123.0	108.1	95.9
C - Manufacturing	86.4	87.6	117.8	108.3	100.0	89.3	92.1	120.5	110.3	103.0	88.7	91.6	123.2	116.3	105.0	88.2
D - Electricity, gas, steam and air conditions supply	81.7	119.0	96.5	102.8	100.0	88.7	126.4	98.5	109.3	105.8	95.7	119.6	96.0	122.1	108.3	92.0
E - Water supply, sewerage, waste management and remediation activities	88.8	90.4	104.1	116.7	100.0	95.7	100.1	109.2	117.3	105.6	92.1	84.5	101.5	112.9	97.7	80.5
F - Construction	88.1	90.3	109.1	112.6	100.0	89.8	93.0	111.9	120.0	103.7	92.1	95.6	114.9	127.3	107.5	94.2
G - Wholesale and retail trade; repair of motor vehicles and motor recycles	92.0	90.1	109.3	108.6	100.0	90.9	92.8	112.1	111.8	101.9	91.6	90.1	112.6	114.3	102.1	92.0
H - Transport and storage	87.1	91.1	114.8	107.0	100.0	92.6	95.7	123.2	111.1	105.6	90.8	95.2	121.0	116.1	105.7	91.5
I - Accommodation and food service activities	89.7	86.8	112.5	111.1	100.0	91.9	86.1	115.0	114.1	101.8	92.3	90.3	107.6	111.7	100.5	92.6
K - Financial and insurance activities	106.4	90.7	93.8	109.0	100.0	109.0	84.8	101.9	106.3	100.5	107.5	85.7	97.0	116.5	101.7	102.2
P - Education (excluding public administration)	84.0	83.6	131.4	101.0	100.0	81.0	88.6	135.0	104.0	102.2	80.6	85.4	127.8	110.1	101.0	82.2
Q - Human health and social work activities (excluding public administration)	84.8	95.1	110.0	110.1	100.0	86.0	96.5	114.6	112.7	102.4	87.8	98.4	109.9	113.9	102.5	89.0
<b>By region NUTS II (2002) (B_S, excluding public administration)</b>																
101 - Norte	90.4	88.2	111.7	109.7	100.0	92.1	89.7	114.1	111.2	101.8	91.3	88.5	115.4	115.5	102.7	89.8
106 - Centro	90.7	91.1	110.0	108.1	100.0	92.6	92.4	111.5	111.4	102.0	92.8	93.2	113.8	113.5	103.3	89.8
107 - Lisboa	89.6	89.2	112.9	108.2	100.0	91.0	91.5	113.8	108.1	101.1	90.3	90.1	111.4	112.0	100.9	90.9
108 - Alentejo	89.6	91.3	107.6	111.5	100.0	93.6	95.0	112.9	113.9	103.8	93.7	94.4	113.4	119.2	105.2	89.4
109 - Algarve	88.6	92.5	107.7	111.3	100.0	92.1	96.7	114.2	116.7	104.9	92.6	95.7	111.1	113.3	103.2	95.6
201 - R.A. Açores	88.1	90.3	111.2	110.4	100.0	90.5	91.3	114.3	110.8	101.7	92.0	93.6	114.0	117.4	104.2	96.8
301 - R.A. Madeira	94.1	87.2	107.4	111.3	100.0	96.5	95.5	117.0	117.9	106.7	99.0	100.0	121.9	125.4	111.6	100.2
<b>By occupational group (ISCO-08) (B_S, excluding public administration)</b>																
1 - Managers	96.0	89.7	106.7	107.7	100.0	101.5	91.9	113.4	111.8	104.7	99.1	88.7	108.9	114.3	102.7	94.0
2 - Professionals	88.2	92.8	111.8	107.2	100.0	88.8	93.8	118.6	112.2	103.3	89.1	93.2	113.4	114.4	102.5	88.2
3 - Technicians and associate professionals	91.3	89.2	110.9	108.5	100.0	91.8	91.7	112.0	111.7	101.8	90.6	89.9	113.7	115.4	102.4	90.0
4 - Clerical support workers	88.7	90.8	111.1	109.4	100.0	89.2	91.7	115.1	111.8	101.9	89.3	91.4	116.2	115.7	103.1	93.0
5 - Service and sales workers	85.6	91.3	109.9	113.2	100.0	91.6	90.8	112.5	115.9	102.7	92.4	95.3	114.3	118.6	105.2	93.9
6 - Skilled agricultural, forestry and fishery workers	88.8	95.0	109.1	107.1	100.0	85.7	92.4	113.2	116.6	102.0	89.8	91.2	114.8	122.7	104.6	93.5
7 - Craft and related trade workers	85.5	89.9	113.9	110.7	100.0	90.8	95.9	119.4	113.7	105.0	90.6	94.2	117.0	118.4	105.0	91.2
8 - Plant and machine operators, and assemblers	85.9	89.1	115.1	109.9	100.0	88.3	91.9	114.3	112.4	101.7	89.1	91.3	115.4	114.9	102.7	87.6
9 - Elementary occupations	87.6	90.4	110.1	111.9	100.0	89.1	94.3	113.0	114.8	102.8	90.9	96.6	116.0	119.0	105.6	93.2

**Source:** INE, Labour Cost Index and Employment Statistics - 1<sup>st</sup> quarter of 2011.

**Note:** The series are non-adjusted data.



**Table 7: Year-on-year rate of change by economic activity, region NUTS II and occupational group**

	2008Q1	2008Q2	2008Q3	2008Q4	2008	2009Q1	2009Q2	2009Q3	2009Q4	2009	2010Q1	2010Q2	2010Q3	2010Q4	2010	2011Q1	Unit: %
<b>By economic activities (Nace-Rev. 2)</b>																	
Total (B_S, excluding public administration)	5.5	3.1	3.7	4.5	4.2	2.5	3.1	3.3	2.7	2.9	-0.1	-0.4	-0.4	4.1	0.9	-0.7	
Total (B_N)	5.3	3.1	3.8	4.6	4.2	2.7	3.1	3.4	2.7	3.0	-0.2	-0.3	-0.1	4.2	1.0	-0.8	
B - Mining and quarrying	0.7	-3.3	-3.3	-4.0	-2.6	5.0	4.5	8.3	7.3	6.4	1.8	-2.3	1.7	4.5	1.6	-0.4	
C - Manufacturing	4.8	0.5	3.6	0.9	2.4	3.4	5.1	2.3	1.8	3.0	-0.7	-0.4	2.3	5.4	1.9	-0.5	
D - Electricity, gas, steam and air conditions supply	-4.0	4.0	-2.9	5.8	1.0	8.6	6.2	2.1	6.4	5.8	7.8	-5.4	-2.6	11.7	2.4	-3.8	
E - Water supply, sewerage, waste management and remediation activities	0.0	0.0	0.0	0.0	0.0	7.8	10.8	4.9	0.5	5.6	-3.8	-15.6	-7.1	-3.8	-7.4	-12.6	
F - Construction	4.7	4.4	1.0	5.4	3.8	1.9	3.0	2.6	6.6	3.7	2.6	2.9	2.7	6.0	3.7	2.3	
G - Wholesale and retail trade; repair of motor vehicles and motor recycles	4.9	4.3	3.4	6.1	4.7	-1.2	3.0	2.6	2.9	1.9	0.8	-2.9	0.5	2.2	0.2	0.5	
H - Transport and storage	4.1	3.6	7.2	5.2	5.1	6.3	5.0	7.4	3.8	5.6	-2.0	-0.5	-1.8	4.4	0.1	0.8	
I - Accommodation and food service activities	1.3	0.6	3.3	4.4	2.5	2.5	-0.8	2.3	2.8	1.8	0.4	5.0	-6.5	-2.1	-1.3	0.3	
K - Financial and insurance activities	6.2	7.7	14.9	15.0	10.8	2.4	-6.5	8.6	-2.5	0.5	-1.3	1.0	-4.8	9.6	1.2	-4.9	
P - Education (excluding public administration)	12.3	1.4	-1.2	-0.1	2.2	-3.6	6.0	2.8	3.0	2.2	-0.5	-3.6	-5.4	5.8	-1.2	2.1	
Q - Human health and social work activities (excluding public administration)	5.7	3.1	0.2	-1.0	1.6	1.4	1.4	4.2	2.3	2.4	2.1	2.0	-4.1	1.1	0.1	1.4	
<b>By region NUTS II (2002) (B_S, excluding public administration)</b>																	
101 - Norte	6.4	3.2	2.5	3.9	3.9	1.9	1.7	2.2	1.3	1.8	-0.8	-1.4	1.1	3.9	0.9	-1.7	
106 - Centro	6.1	3.5	1.6	4.7	3.9	2.1	1.3	1.3	3.0	2.0	0.2	0.9	2.0	1.9	1.3	-3.2	
107 - Lisboa	4.6	2.5	7.9	5.1	5.2	1.6	2.5	0.7	-0.1	1.1	-0.9	-1.5	-2.1	3.6	-0.2	0.7	
108 - Alentejo	-0.1	-3.0	1.5	-0.9	-0.6	4.5	4.0	4.9	2.2	3.8	0.1	-0.6	0.5	4.6	1.3	-4.6	
109 - Algarve	1.6	1.4	4.8	2.5	2.6	4.0	4.6	6.0	4.9	4.9	0.5	-1.0	-2.7	-2.9	-1.7	3.2	
201 - R.A. Açores	4.7	2.3	4.6	3.7	3.8	2.8	1.1	2.8	0.3	1.7	1.6	2.5	-0.3	6.0	2.5	5.2	
301 - R.A. Madeira	12.8	-2.3	0.5	1.2	2.7	2.5	9.6	9.0	5.9	6.7	2.6	4.6	4.2	6.4	4.6	1.2	
<b>By occupational group (ISCO-08) (B_S, excluding public administration)</b>																	
1 - Managers	6.0	9.5	3.3	12.1	7.6	5.8	2.5	6.3	3.9	4.7	-2.4	-3.5	-4.0	2.2	-1.8	-5.1	
2 - Professionals	5.8	6.3	1.8	1.8	3.7	0.7	1.1	6.1	4.6	3.3	0.4	-0.6	-4.3	1.9	-0.8	-1.1	
3 - Technicians and associate professionals	5.6	3.0	7.9	5.0	5.5	0.5	2.7	0.9	2.9	1.8	-1.3	-1.9	1.5	3.3	0.6	-0.6	
4 - Clerical support workers	5.2	3.7	3.9	4.1	4.2	0.5	1.0	3.6	2.2	1.9	0.1	-0.3	1.0	3.5	1.2	4.2	
5 - Service and sales workers	5.9	4.9	8.7	4.9	6.1	7.0	-0.6	2.4	2.4	2.7	1.0	5.0	1.6	2.3	2.4	1.6	
6 - Skilled agricultural, forestry and fishery workers	4.7	10.2	-3.4	1.6	2.7	-3.5	-2.8	3.8	8.8	2.0	4.8	-1.3	1.4	5.3	2.6	4.1	
7 - Craft and related trade workers	2.6	2.1	1.9	3.6	2.5	6.2	6.7	4.8	2.8	5.0	-0.2	-1.9	-2.0	4.1	0.1	0.7	
8 - Plant and machine operators, and assemblers	3.4	2.7	6.2	6.2	4.8	2.8	3.1	-0.7	2.3	1.7	1.0	-0.6	1.0	2.3	1.0	-1.7	
9 - Elementary occupations	6.3	7.3	5.5	6.9	6.5	1.7	4.3	2.7	2.6	2.8	2.0	2.4	2.7	3.6	2.7	2.6	

**Source:** INE, Labour Cost Index and Employment Statistics - 1<sup>st</sup> quarter of 2011.

**Note:** The series are non-adjusted data.

## TECHNICAL NOTE

In order to be in line with the series published by Eurostat, which has change the reference year of Labour Cost Index (LCI) from 2000 to 2008, the indices that became available, from the 2<sup>nd</sup> quarter 2009, consider the year 2008 as the reference year. Series were rebased for the reference year 2008, since the 1<sup>st</sup> quarter of 2000.

A new statistical classification for economic activities (NACE Rev. 2) was established by the Regulation Nº 1893/2006 of December 20<sup>th</sup> and states that it ought to be used by statistics related to economic activities performed from January 2008 onwards. The adoption and transposition for the Portuguese classifications led to "Classificação Portuguesa das Actividades Económicas Revisão 3" (CAE-Rev. 3). In the LCI case, the regulation entered into force in January 2009, covering data already published for the period 2000-2008 and for the first quarter 2009 onwards. To obtain data classified by CAE-Rev. 3, it was necessary to reclassify and recalculate data from several sources that allowed the computation of the LCI (such as Labour Cost Index, Lists of Personnel, Labour Cost Survey and Labour Force Survey). The LCI data between 2000 and 2008 were reprocessed and should be considered as preliminary.

Mention that from the first quarter of 2011, the information used in the LCI calculation, including the average of hours worked per week by employees, comes from the Labour Force Survey (LFS) – 2011 series.

Also in the 1<sup>st</sup> quarter of 2011, the ISCO-08 was adopted in LCI and LFS. In order to allow the calculation of variations, Statistics Portugal carried out an exercise of back series calculations for the LCI components according the ISCO-08, using, among other elements, the equivalence tables between the two classifications (ISCO-08 and ISCO-88).

In this press release, the series are working day adjusted (WDA), as released by Eurostat, and unadjusted series (NSA, Non-Adjusted Data), by economic activity (NACE-Rev. 2), by region NUTS II (2002) and by occupational group (ISCO-08). The data exclude the following activities: "Public administration and defence; compulsory social security" (O); and the public part of the following activities: "Education" (P) and "Human health and social work activities" (Q).

The LCI is an indicator that measures the development of the average labour cost per worked hour (hourly labour costs).

The changes in the employment, hours actually worked and prices levels affect the indices obtained during the observed periods.

Formula for the calculation of the LCI:

$$LCI_{tj}(k) = \frac{\sum_{i=B}^S w_i^{tj} h_i^{tk}}{\sum_{i=B}^S w_i^{tk} h_i^{tk}}$$

$LCI_{tj}(k)$  = Labour Cost Index, quarter  $t$ , year  $j$  (related to the base period quarter  $t$ , year  $k$ )

$i = \{B, S\}$  = Sector of economic activity

$tj$  = quarter  $t$  of year  $j$  under observation

$tk$  = quarter  $t$  of year  $k$ , base period (2000)

$w_i^{tj}$  = Labour cost of employees by hour worked in sector  $i$  in quarter  $t$  in year  $j$

$h_i^{tk}$  = Hours actually worked in sector  $i$  in quarter  $t$  in year  $k$

$w_i^{tj} * h_i^{tk}$  = Total labour cost in sector  $i$  in quarter  $t$  in year  $j$ ; the hours were evaluated in quarter  $t$  in year  $k$

$w_i^{tk} * h_i^{tk}$  = Total labour cost in sector  $i$  in quarter  $t$  in year  $k$  (base)

The actual labour cost adopts the perspective of the employer, corresponding to the total cost incurred by the employer and including the following items:

- ✓ Basic wage and salaries
- ✓ Regular bonuses and allowances (paid in each pay period)
- ✓ Irregular bonuses and allowances (not paid in each pay period)
- ✓ Overtime payment
- ✓ Payments and benefits in kind
- ✓ Payment for hours not worked
- ✓ Employer's social contributions
- ✓ Collectively agreed, contractual and voluntary social security contributions
- ✓ Other (including payments to employees leaving the enterprise)

**Year-on-year rate of change:** the year-on-year change compares the level of the variable in the current quarter with that of the corresponding quarter of the previous year. This rate of change, considering a seasonal stable pattern is not affected by this type of fluctuation, but may, however, be influenced by specific effects in a given quarter.

## DATE SCHEDULED FOR THE NEXT PRESS RELEASE

August, 12<sup>th</sup> 2011.