

January, 11<sup>th</sup> 2017

Consumer Prices Index

December 2016

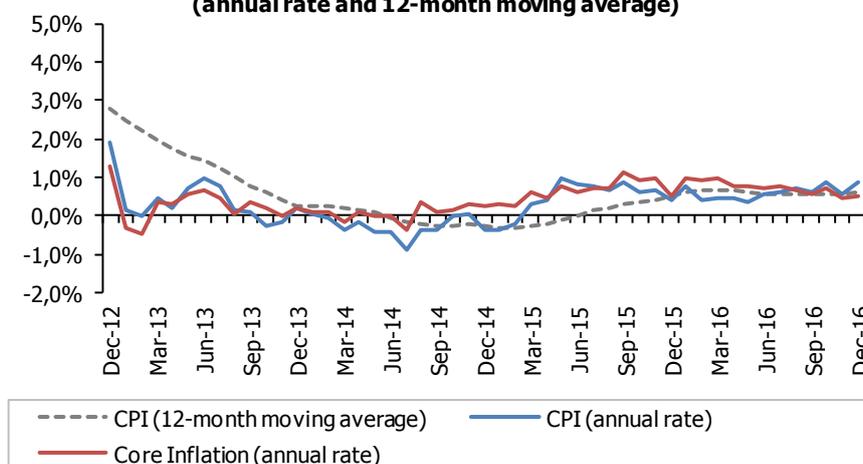
**The CPI annual average rate of change was 0.6% in 2016  
and the rate of change on a year earlier was 0.9% in December**

The average rate of change of the Portuguese Consumer Price Index (CPI) was 0.6% in 2016 (0.5% in 2015). Excluding energy and unprocessed food, the average rate of change was 0.7% in 2016 (the same value as in the previous year).

The CPI annual rate was 0.9% in December 2016, 0.3 percentage points (p.p.) above the previous month. This acceleration of the CPI was mainly determined by the behaviour of the prices of *Fuels and lubricants for personal transport equipment*. The annual core inflation rate, which excludes energy and unprocessed food products components, was 0.5% (0.4% in November). The CPI monthly rate was nil (-0.5% in November and -0.3% in December 2015).

In 2016, the annual average rate of change of the Portuguese Harmonised Index of Consumer Prices (HICP) was 0.6% (0.5% in 2015). In December 2016, the annual rate of change was 0.9% (0.5% in the previous month), 0.2 p.p. below the rate estimated by Eurostat for the Euro area (in November this difference was 0.1 p.p.).

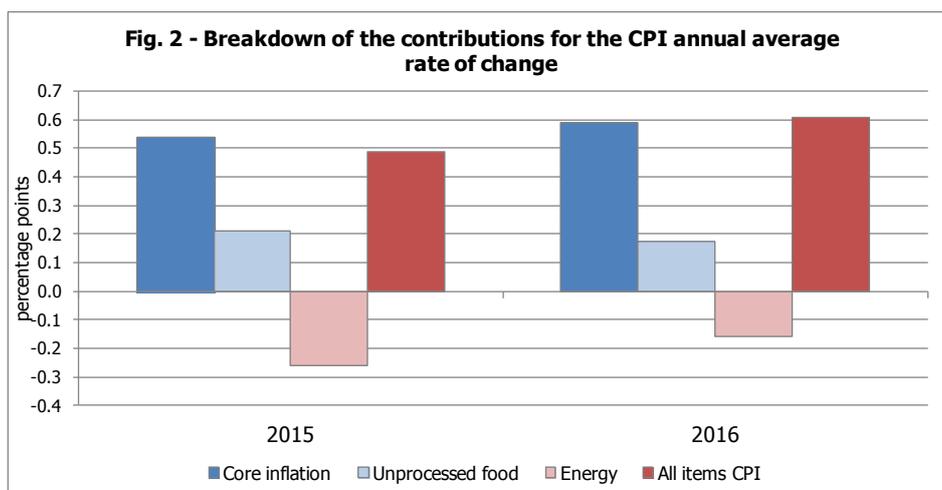
**Fig. 1 - Consumer price and core inflation indices  
(annual rate and 12-month moving average)**



The annual average rate of change of the Portuguese Consumer Price Index (CPI) increased to 0.6% in 2016 (0.5% in 2015). The annual average core inflation rate, which excludes unprocessed food and energy, was 0.7% (the same value as in the previous year).

As core inflation stabilized, the increase of the average rate of change of the CPI between 2015 and 2016 was influenced by the evolution of prices of energy products (see Fig. 2). In fact, the annual average rate of change of this aggregate was less negative in 2016, moving from -3.6% in 2015 to -1.8%.

The prices of unprocessed food decelerated in 2016, although maintaining a positive annual average rate of change which attained 1.6% in 2016 (1.9% in 2015).



In December 2016, the annual inflation rate measured by the CPI was 0.9%, 0.3 percentage points (p.p.) higher than in the previous month (see Fig. 1). This acceleration of the CPI was mainly determined by the behaviour of the prices of *Fuels and lubricants for personal transport equipment*, which moved from 4.2% in November to 10.7% in December.

The annual core inflation rate, which excludes energy and unprocessed food products components, was 0.5% (0.4% in the previous month). The unprocessed food aggregate recorded an annual increase of 1.2% in December (1.5% in November) while prices of energy products presented an annual increase of 4.0% (0.6% in November).

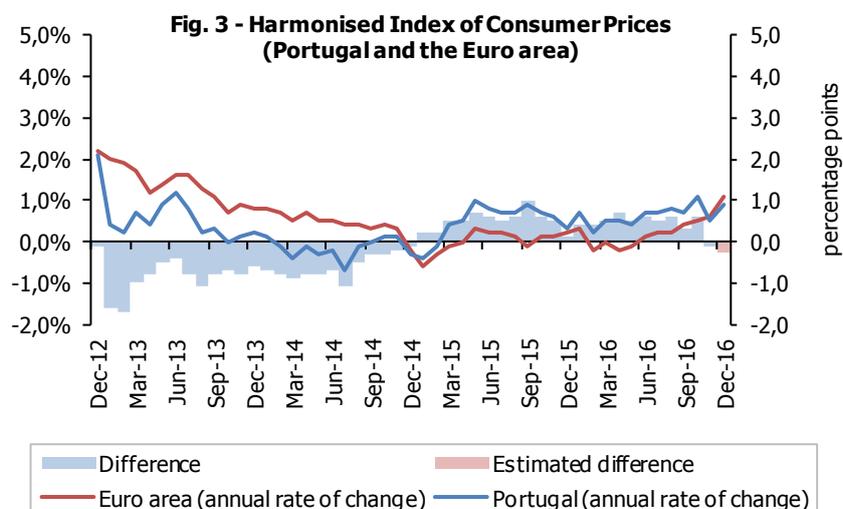
The largest upward pressure on the overall annual rate of change came from increases in the prices of *Transports* (1.9%) and *Communications* (5.2%), while the major downward pressure came from changes in the prices of *Clothing and footwear* (-0.9%) and *Health* (-0.8%).

In December, the CPI monthly rate was nil (-0.5% in November and -0.3% in December 2015). The main upward contribution to this result came from changes in the prices of *Transports* and *Communications*. On the opposite side, decreases were observed in the prices of *Clothing and footwear*.

In December 2016, the HICP annual rate was 0.9% (0.5% in the previous month) while the HICP monthly rate was nil (-0.3% in December 2015).

In November, the annual rate of change of the Euro area was 0.1 p.p. higher than the annual rate of change of the Portuguese HICP. That difference is estimated to increase to 0.2 p.p. in December 2016.

The HICP 12-month average rate was 0.6% in December (0.6% in November).



### Housing Rents

In December 2016 the monthly rate of change of the average value of rents by net area for the whole country was nil (0.3% in the previous month).

The main increase was recorded in the Madeira region (0.7%). The main decrease was observed in the Açores region, where the value of rents by net area decreased by 0.5%.

The annual change rate of the housing rents for the whole country was 2.3% in December (2.1% in November). The main increase was observed in the Centro region (3.9%), and all the other regions presented positive rates.

In 2016, the 12-month average rate of change for of the average value of rents by net area for the whole country was 1.7%. The main increases were recorded in the Açores and Centro regions (3.6%) while all the other regions presented positive rates.

## Consumer Price Index

The Consumer Price Index (CPI) measures the change over time of the prices of a certain basket of goods and services bought by a “typical” consumer. The CPI has been designed to capture price changes and not to measure price levels.

The CPI is updated every year with the most recent information on prices and quantities. The 2016 CPI weighting structure and the sample of goods and services included in the basket are a result of the combination of three fundamental sources of information: results of the Portuguese National Accounts complemented with the Household Budget Survey and the Census for more detailed levels of expenditure. Administrative data is also used.

The CPI is compiled through the aggregation of seven regional price indexes and the goods and services included in the index are grouped according to the COICOP classification.

**Table 1: CPI - COICOP Divisions**

01	Food and non-alcoholic beverages	07	Transports
02	Alcoholic beverages and tobacco	08	Communications
03	Clothing and footwear	09	Recreation and culture
04	Housing, water, electricity, gas and other fuels	10	Education
05	Furnishings, household equipment and routine maintenance of the house	11	Restaurants and hotels
06	Health	12	Miscellaneous goods and services

<sup>1</sup>COICOP: Classification Of Individual Consumption by Purpose

### Monthly rate

The monthly rate is the change in the index of a certain month compared with the index of the previous month expressed as a percentage. Although up-to-date, this measure can be affected by seasonal and other effects.

### Annual rate

The annual rate is the change in the index of a certain month compared with the index of the same month in the previous year expressed as a percentage. In the presence of a stable seasonal pattern, seasonal effects do not influence this measure.

### 12-month average rate

The 12-month average rate is the change in the average index of one year compared with the average index of the previous year expressed as a percentage. This moving average is less sensitive to transient changes in prices.

### Core inflation index (all items CPI excluding unprocessed food and energy products)

The core inflation index is compiled by excluding the prices of unprocessed food and energy products from the all items CPI. The primary objective of this index is to capture the underlying inflation pressures in the economy.

### Harmonised Index of Consumer Prices

The Harmonised Index of Consumer Prices (HICP) is compiled in each member state of the European Union for the purposes of inflation comparisons across EU countries, as required by the Treaty on European Union<sup>1</sup>. This index plays an important role as a guideline for the achievement of the European System of Central Banks primary objective: price stability. In 1998, the European Central Bank adopted the HICP as “the most appropriate price measure” for its definition of price stability in the Euro area<sup>2</sup>.

With the release of the January 2016 HICP, the index reference period changed to 2015 = 100, in line with the procedure adopted at European level: [Council Regulation \(EU\) 2015/2010 of the Commission](#) of 11 November 2015, as regards the common index reference period for the harmonised index of consumer prices. The new regulation is based on the need to “ensure the comparability and relevance of the HICP” as a result of “changes to the sub-index classification of the HICP and the alignment of sub-indices that have been linked to the HICP after the introduction of 2005 = 100”. The historical information available on the previous base (2005 = 100) was thus replaced. More detailed information on the new reporting period can be found at <http://ec.europa.eu/eurostat/web/hicp/methodology/reference-year-2015>.

<sup>1</sup> Article 109j and protocol on the convergence criteria referred to in that article.

<sup>2</sup> A stability oriented monetary policy strategy for the ESCB”. ECB press notice released on 13 October 1998.

The HICP is produced in each Member State following a harmonized methodology developed by experts in the field of price statistics, under the "Price Statistics Working Group" and related Task Forces. From the methodological point of view, there are no major differences between the HICP and CPI. However, the different scope of coverage leads to differences in the weighting structure, mainly in Restaurants and hotels. This is mostly an effect of the inclusion of non-residents expenditure ("tourists") in the HICP and the corresponding exclusion from the CPI.

Additional information on the methodology of the HICP is available at <http://ec.europa.eu/eurostat/web/hicp>.

**Table 2: CPI and HICP 2016 weighting structure**

COICOP divisions		CPI	HICP
01	Food and non-alcoholic beverages	207,9	200,2
02	Alcoholic beverages and tobacco	40,2	39,4
03	Clothing and footwear	69,0	70,1
04	Housing, water, electricity, gas and other fuels	102,7	97,0
05	Furnishings, household equipment and routine maintenance of the house	62,4	60,9
06	Health	63,4	60,8
07	Transport	139,6	137,9
08	Communication	36,8	34,7
09	Recreation and culture	72,2	61,0
10	Education	16,7	15,7
11	Restaurants and hotels	85,5	123,7
12	Miscellaneous goods and services	103,6	98,5
00	All items	<b>1000</b>	<b>1000<sup>2</sup></b>

<sup>1</sup> COICOP: Classification Of Individual Consumption by Purpose.

<sup>2</sup> Due to rounding, the sum of the parts may not add exactly to 1000.

### Presentation of data and rounding rules

Since the release of the January 2013 CPI indices are published with base 100 in the year 2012.

Due to rounding procedures, those indices may not reproduce exactly the published rates of change. However, it should be noted that the published rates prevail.

In this press release the descriptive analysis is based on rounded values to one decimal.

### Next press release

The December 2016 CPI/HICP will be released on February 10<sup>th</sup> 2017.

## Annex:

### CPI rate of change (index division and all items CPI)

	Index divisions <sup>(1)</sup>												All-items CPI
	01	02	03	04	05	06	07	08	09	10	11	12	
	Annual average rate												
2014	-1.34	3.09	-2.11	2.22	-0.38	0.66	-1.20	1.10	-1.49	0.43	0.97	-0.46	-0.28
2015	1.01	4.09	-2.02	0.23	0.67	0.41	-0.99	4.12	-0.63	0.65	1.31	0.42	0.49
2016	0.49	2.61	-0.39	0.39	0.43	-0.61	-0.56	3.17	1.02	0.89	2.21	0.60	0.61
	Annual rate												
2014 December	-0.38	3.09	-1.84	1.92	1.12	0.32	-4.38	0.28	-1.24	0.60	1.64	-0.48	-0.36
2015 January	-0.13	3.09	-1.48	1.05	0.99	0.34	-4.21	1.19	-1.32	0.60	1.34	-0.55	-0.39
February	0.01	3.19	-1.84	0.20	0.84	0.65	-2.78	2.80	-1.52	0.60	1.78	-0.85	-0.21
March	0.29	2.60	-1.99	0.32	0.76	0.59	-0.26	3.63	-0.93	0.54	1.98	-0.61	0.31
April	1.18	4.04	-2.44	0.50	0.64	0.50	-1.40	3.55	-1.40	0.49	1.89	-0.02	0.40
May	2.07	5.07	-2.54	0.48	0.60	0.56	1.04	3.58	-0.82	0.50	1.57	-0.02	0.95
June	1.95	4.91	-3.44	0.62	0.78	0.49	-0.20	4.90	-0.53	0.51	1.54	0.02	0.80
July	1.53	4.97	-2.86	0.24	1.15	0.34	-0.42	4.98	-0.48	0.59	1.43	0.41	0.77
August	1.71	4.36	-2.65	0.05	1.14	0.47	-1.83	4.96	-0.42	0.58	1.51	1.08	0.66
September	1.98	4.28	-0.23	-0.22	1.19	0.29	-1.11	5.53	-0.54	0.59	1.03	1.02	0.88
October	1.27	3.89	-0.90	-0.32	-0.10	0.19	-0.85	4.77	-0.54	0.93	0.95	1.60	0.63
November	0.36	4.31	-1.68	-0.16	-0.01	0.18	0.36	4.73	0.81	0.95	0.51	1.69	0.64
December	0.00	4.32	-2.28	0.04	0.05	0.28	-0.09	4.93	0.21	0.93	0.23	1.33	0.40
2016 January	0.21	4.37	0.16	-0.07	0.77	-0.01	0.04	5.31	0.98	0.91	0.60	1.60	0.78
February	-0.62	4.06	-0.23	0.59	1.14	-0.19	-1.28	3.95	1.90	0.92	0.15	1.09	0.40
March	-0.73	4.38	0.02	0.62	1.22	-0.16	-1.43	3.30	1.26	0.93	1.77	0.90	0.45
April	0.09	2.41	0.04	0.69	0.89	-0.92	-0.93	2.95	0.74	0.94	1.99	0.43	0.48
May	-0.10	2.27	-0.76	0.65	0.67	-0.98	-1.29	2.76	0.94	0.94	2.19	0.50	0.33
June	1.01	1.89	-0.86	0.69	0.62	-0.90	-1.49	1.75	0.94	0.94	2.61	0.74	0.55
July	1.65	1.77	1.32	0.12	0.35	-0.72	-2.10	1.66	0.36	0.91	2.62	0.63	0.61
August	1.82	2.16	0.78	0.28	0.02	-0.76	-1.29	1.57	-0.29	0.89	3.29	0.41	0.72
September	0.99	1.65	-0.81	-0.05	-0.26	-0.59	-0.29	2.51	0.76	0.89	3.38	0.39	0.63
October	0.45	2.23	-1.44	0.24	0.02	-0.60	0.94	3.05	2.56	0.77	4.20	0.10	0.88
November	0.49	2.05	-1.36	0.28	0.04	-0.62	0.68	4.07	1.21	0.81	1.76	-0.01	0.58
December	0.62	2.28	-0.93	0.61	-0.35	-0.84	1.89	5.18	0.91	0.82	1.85	0.42	0.88

**Symbols:** f estimated Po provisional x not available

**Note:** (1) The names of the divisions are given in the explanatory notes.

**Source:** INE - Portugal

### HICP rate of change (international comparison)<sup>(1)</sup>

	EA-19 <sup>(2)</sup>	EICP <sup>(3)</sup>	BE	BG	CZ	DK	DE	EE	EL	ES	FR	HR	IE	IT	CY	LV	LT	LU	HU	MT	NL	AT	PL	PT	RO	SI	SK	FI	SE	UK
<b>Annual average rate</b>																														
2014	<b>0.4</b>	0.5	0.5	-1.6	0.4	0.4	0.8	0.5	-1.4	-0.2	0.6	0.2	0.3	0.2	-0.3	0.7	0.2	0.7	0.0	0.8	0.3	1.5	0.1	<b>-0.2</b>	1.4	0.4	-0.1	1.2	0.2	1.5
2015	<b>0.0</b>	0.0	0.6	-1.1	0.3	0.2	0.1	0.1	-1.1	-0.6	0.1	-0.3	0.0	0.1	-1.5	0.2	-0.7	0.1	0.1	1.2	0.2	0.8	-0.7	<b>0.5</b>	-0.4	-0.8	-0.3	-0.2	0.7	0.0
2016	<b>x</b>	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	<b>0.6</b>	x	x	x	x	x	x
<b>Annual rate</b>																														
2014 December	<b>-0.2</b>	-0.1	-0.4	-2.0	0.0	0.1	0.0	0.1	-2.5	-1.1	0.1	-0.1	-0.3	0.0	-1.0	0.3	-0.1	-0.9	-0.8	0.4	-0.1	0.8	-0.7	<b>-0.3</b>	1.0	-0.1	-0.1	0.6	0.3	0.5
2015 January	<b>-0.6</b>	-0.5	-0.6	-2.4	-0.1	-0.3	-0.4	-0.5	-2.8	-1.5	-0.4	-0.6	-0.4	-0.5	-0.7	-0.3	-1.4	-1.2	-1.4	0.8	-0.7	0.5	-1.1	<b>-0.4</b>	0.5	-0.7	-0.5	-0.1	0.4	0.3
February	<b>-0.3</b>	-0.3	-0.4	-1.7	0.0	-0.1	0.0	-0.2	-1.9	-1.2	-0.3	-0.4	-0.4	0.1	-0.8	0.0	-1.5	-0.3	-0.9	0.6	-0.5	0.5	-1.3	<b>-0.1</b>	0.4	-0.5	-0.6	-0.1	0.7	0.0
March	<b>-0.1</b>	-0.1	-0.1	-1.1	0.1	0.3	0.2	0.0	-1.9	-0.8	0.0	0.0	-0.2	0.0	-1.4	0.5	-1.1	0.1	-0.5	0.5	-0.3	0.9	-1.2	<b>0.4</b>	0.8	-0.4	-0.4	0.0	0.7	0.0
April	<b>0.0</b>	0.0	0.4	-0.9	0.5	0.4	0.3	0.4	-1.8	-0.7	0.1	-0.1	-0.3	-0.1	-1.7	0.6	-0.6	0.0	0.0	1.4	0.0	0.9	-0.8	<b>0.5</b>	0.6	-0.7	-0.1	-0.1	0.5	-0.1
May	<b>0.3</b>	0.3	0.8	-0.3	0.7	0.4	0.6	0.5	-1.4	-0.3	0.3	0.0	0.2	0.2	-1.7	1.2	0.0	0.4	0.6	1.3	0.7	1.0	-0.6	<b>1.0</b>	1.3	-0.8	-0.1	0.1	0.9	0.1
June	<b>0.2</b>	0.1	0.9	-0.6	0.9	0.4	0.2	0.3	-1.1	0.0	0.3	0.1	0.4	0.2	-2.1	0.7	-0.2	0.5	0.7	1.1	0.5	1.0	-0.5	<b>0.8</b>	-0.9	-0.9	-0.1	0.1	0.4	0.0
July	<b>0.2</b>	0.2	0.9	-1.0	0.5	0.5	0.1	0.1	-1.3	0.0	0.2	-0.2	0.2	0.4	-2.4	-0.2	-0.2	0.2	0.5	1.2	0.8	1.1	-0.5	<b>0.7</b>	-1.4	-0.7	-0.2	-0.1	0.8	0.1
August	<b>0.1</b>	0.0	0.8	-0.8	0.2	0.3	0.1	0.2	-0.4	-0.5	0.1	-0.1	0.2	0.3	-1.9	0.2	-1.0	0.1	0.1	1.4	0.4	1.0	-0.4	<b>0.7</b>	-1.7	-0.6	-0.2	-0.2	0.6	0.0
September	<b>-0.1</b>	-0.1	0.9	-1.0	0.3	0.3	-0.1	-0.3	-0.8	-1.1	0.1	-0.5	-0.1	0.2	-1.9	-0.4	-0.8	-0.2	-0.1	1.6	0.3	0.6	-0.7	<b>0.9</b>	-1.5	-1.0	-0.5	-0.7	0.9	-0.1
October	<b>0.1</b>	0.0	1.2	-1.2	0.1	0.1	0.2	0.0	-0.1	-0.9	0.2	-0.5	-0.1	0.3	-1.8	-0.1	-0.4	-0.1	0.2	1.6	0.4	0.7	-0.6	<b>0.7</b>	-1.4	-1.2	-0.5	-0.3	0.9	-0.1
November	<b>0.1</b>	0.1	1.4	-0.9	0.0	0.1	0.2	0.5	-0.1	-0.4	0.1	-0.4	-0.1	0.1	-1.5	0.0	-0.5	0.4	0.6	1.3	0.4	0.5	-0.5	<b>0.6</b>	-0.9	-0.9	-0.4	-0.2	0.8	0.1
December	<b>0.2</b>	0.2	1.5	-0.9	-0.1	0.3	0.2	-0.2	0.4	-0.1	0.3	-0.3	0.2	0.1	-0.6	0.4	-0.2	0.9	1.0	1.3	0.5	1.1	-0.4	<b>0.3</b>	-0.7	-0.6	-0.5	-0.2	0.7	0.2
2016 January	<b>0.3</b>	0.3	1.8	-0.4	0.5	0.4	0.4	0.1	-0.1	-0.4	0.3	-0.2	0.0	0.4	-1.1	-0.3	0.7	0.5	1.0	0.8	0.2	1.4	-0.3	<b>0.7</b>	-1.5	-0.8	-0.6	0.0	1.3	0.3
February	<b>-0.2</b>	-0.1	1.1	-1.0	0.5	0.1	-0.2	0.4	0.1	-1.0	-0.1	-0.6	-0.2	-0.2	-2.2	-0.6	0.5	-0.3	0.3	1.0	0.3	1.0	-0.2	<b>0.2</b>	-2.1	-0.9	-0.3	-0.1	0.8	0.3
March	<b>0.0</b>	0.0	1.6	-1.9	0.3	-0.3	0.1	0.5	-0.7	-1.0	-0.1	-0.9	-0.6	-0.2	-2.2	-0.6	0.8	-0.6	-0.2	1.0	0.5	0.7	-0.4	<b>0.5</b>	-2.4	-0.9	-0.5	0.0	1.2	0.5
April	<b>-0.2</b>	-0.2	1.5	-2.5	0.5	-0.3	-0.3	0.0	-0.4	-1.2	-0.1	-0.9	-0.2	-0.4	-2.1	-0.7	0.8	-0.6	0.3	0.8	-0.2	0.6	-0.5	<b>0.5</b>	-2.6	-0.7	-0.4	0.3	1.0	0.3
May	<b>-0.1</b>	-0.1	1.6	-2.5	0.0	-0.1	0.0	0.0	-0.2	-1.1	0.1	-1.2	-0.2	-0.3	-1.9	-0.8	0.2	-0.6	-0.1	1.0	-0.2	0.6	-0.4	<b>0.4</b>	-3.0	-0.5	-0.7	0.3	0.8	0.3
June	<b>0.1</b>	0.1	1.8	-1.9	-0.1	0.1	0.2	0.4	0.2	-0.9	0.3	-1.2	0.1	-0.2	-2.0	-0.6	0.4	-0.4	-0.1	1.0	-0.2	0.6	-0.4	<b>0.7</b>	-0.7	0.1	-0.7	0.3	1.2	0.5
July	<b>0.2</b>	0.2	2.0	-1.1	0.5	0.1	0.4	0.8	0.2	-0.7	0.4	-1.1	0.1	-0.2	-0.4	0.1	0.0	-0.4	-0.3	0.9	-0.6	0.6	-0.6	<b>0.7</b>	-0.3	-0.1	-0.9	0.5	1.1	0.6
August	<b>0.2</b>	0.3	2.0	-1.1	0.6	0.0	0.3	1.1	0.4	-0.3	0.4	-1.5	-0.4	-0.1	-0.6	-0.1	0.5	-0.2	-0.1	1.0	0.1	0.6	-0.5	<b>0.8</b>	0.3	-0.2	-0.8	0.5	1.2	0.6
September	<b>0.4</b>	0.4	1.8	-1.1	0.5	-0.3	0.5	1.7	-0.1	0.0	0.5	-0.7	-0.3	0.1	-0.4	0.5	0.6	0.3	0.7	0.9	-0.1	1.1	-0.2	<b>0.7</b>	-0.1	0.2	-0.5	0.5	0.8	1.0
October	<b>0.5</b>	0.5	1.9	-1.0	0.8	0.1	0.7	1.0	0.6	0.5	0.5	-0.3	-0.4	-0.1	-1.0	1.1	0.7	0.7	1.1	0.5	0.3	1.4	0.1	<b>1.1</b>	0.1	0.7	-0.3	0.6	1.1	0.9
November	<b>0.6</b>	0.6	1.7	-0.8	1.6	0.1	0.7	1.4	-0.2	0.5	0.7	0.2	-0.2	0.1	-0.8	1.2	1.1	0.6	1.1	0.8	0.4 Po	1.5	0.2	<b>0.5</b>	-0.2	0.7	-0.2	0.6	1.3	1.2
December	<b>1.1 f</b>	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	<b>0.9</b>	x	x	x	x	x	x

**Symbols:** f estimated Po provisional Rc revised x not available

**Notes:** (1) From January 2006 onwards: base 100=2005; index rates of change calculated based on indexes rounded up to two decimal places.

(2) Member States belonging to the Euro Area: EA-13 until December 2007, EA-15 until December 2008, EA-16 until December 2010, EA-17 until December 2013, EA-18 until December 2014, EA-19 from January 2015 (including Lithuania).

(3) European Index of Consumer Prices: EU-15 until April 2004, EU-25 until December 2006, EU-27 until June 2013 and EU-28 onwards.

**Source:** INE-Portugal and Eurostat.

**Code abbreviations of the Member States:**

BE	Belgium	EE	Estonia	IT	Italy	HR	Croatia	PL	Poland	FI	Finland
BG	Bulgaria	EL	Greece	CY	Cyprus	HU	Hungary	PT	Portugal	SE	Sweden
CZ	Czech Republic	ES	Spain	LV	Latvia	MT	Malta	RO	Romania	UK	United Kingdom
DK	Denmark	FR	France	LT	Lithuania	NL	Netherlands	SI	Slovenia		
DE	Germany	IE	Ireland	LU	Luxembourg	AT	Austria	SK	Slovakia		