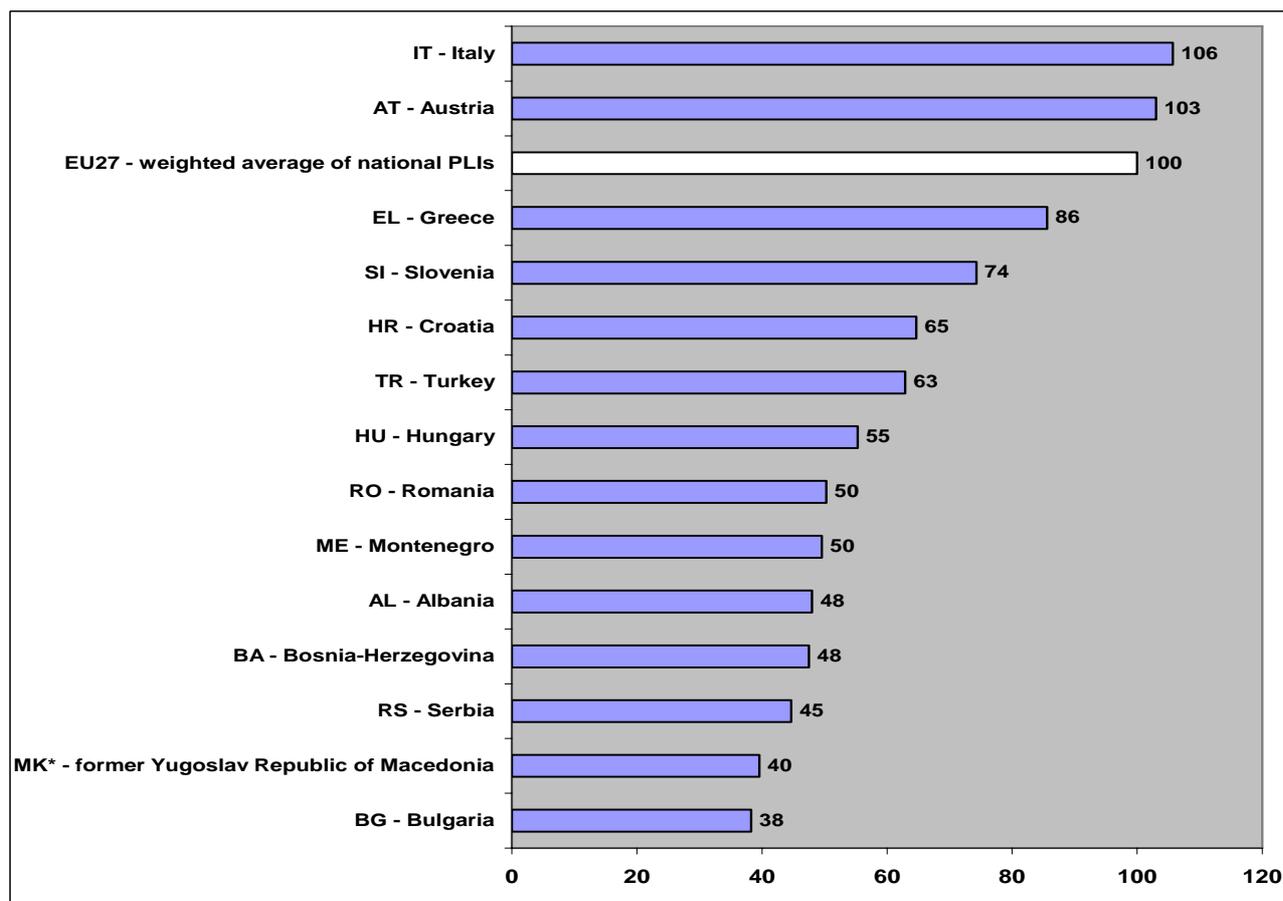


## Comparative price levels for the Western Balkan region for 2006 - actual individual consumption

The price level indices (PLIs) presented in this article have been established within the framework of the European Comparison Programme (ECP), where 37 countries are participating in price surveys of household goods and services. These surveys are carried out by National Statistical Institutes (NSIs), co-ordinated by Eurostat. This article focuses on 2006 PLIs for countries of the Western Balkan region, and on a selection of major components of actual individual consumption.

Four Western Balkan countries (Albania, Bosnia-Herzegovina, Montenegro and Serbia) and two EU Candidate Countries (Croatia and the former Yugoslav Republic of Macedonia) participated in the ECP through the CARDS regional project on statistics. Data for one additional EU Candidate Country, Turkey, have been added as well as a set of seven neighbouring EU Member States (Austria, Bulgaria, Greece, Hungary, Italy, Romania and Slovenia) to complete the picture of the region.

Chart 1: PLI for total actual individual consumption, 2006, EU27 = 100



MK\*: Provisional code which does not prejudice in any way the definitive nomenclature for this country which will be agreed following the conclusion of negotiations currently taking place on this subject at the UN.

Indices presented in this article follow the concept of “actual individual consumption”; it means that PLIs refer to the total value of the individual consumption expenditures by households, non-profit institutions serving households (NPISHs) and general government. The indicators related to this concept are based on individual goods and services that households actually consume. PLIs provide a comparison of the countries’ price levels with respect to the EU average (EU27 = 100): if a price level index is higher than 100, the country concerned is relatively more expensive than the EU average and vice versa. Note that many (mostly Western and Northern European) countries are not included in this publication; therefore the EU27 average may appear high compared to the average of the analysed countries. Data for all countries can be found on Eurostat’s website.

**Chart 1** presents PLIs for a basket of goods and services related to **total actual individual consumption** for 2006 for 14 countries. Chart 1 shows that the four Western Balkan countries (WBCs) form a quite homogeneous group with PLIs within a relatively narrow range (45 – 50% of the EU average). Disparities in the PLIs between the EU countries of this region, however, are marked and lie between 38 (Bulgaria) and 106 (Italy); it means that the total “basket” of goods and services in question is nearly three times more expensive in Italy than in Bulgaria. As can be seen from subsequent tables and charts, the spread in PLIs for services contribute to a significant degree to the spread of the total PLI. In the following sections selected major components and aggregates of actual individual consumption are grouped in order to offer a manageable analysis of the pattern of PLIs across countries. Within each “group” (WBCs, EU Candidate Countries and EU Member States) countries are sorted in alphabetic order based on their country code.

## Food, beverages and tobacco

**Table 1: Food, beverages and tobacco - Price level indices for 2006, EU27 = 100**

	Western Balkan countries				EU Candidate Countries			EU Member States						
	AL	BA	ME	RS	HR	MK	TR	AT	BG	EL	HU	IT	RO	SI
Food	70	70	74	67	87	55	83	112	55	97	70	116	70	88
Non-alcoholic beverages	98	89	78	73	107	67	101	98	72	118	77	109	83	88
Alcoholic beverages	93	78	76	73	113	65	175	81	69	109	76	113	90	87
Tobacco	34	32	24	26	66	31	57	100	52	74	55	100	33	61

**Table 1** presents indices for typical “every-day” consumer goods. Apart from tobacco all indices contained in Table 1 for the WBCs are clearly higher than those presented for the total of actual individual consumption (Chart 1), i.e. these components of consumption are relatively more expensive than the total basket. The PLI for **food** shows little variation between the WBCs and is at a similar level as those of the EU Members Hungary and Romania. **Non-alcoholic beverages** turn out to be relatively more expensive than food in Albania and Bosnia-Herzegovina; for Albania the PLI recorded for non-alcoholic beverages is almost approaching the EU average level (=100).

For the four WBCs, as well as the former Yugoslav Republic of Macedonia and Romania, the PLIs for **tobacco** are by far lower than those for food and beverages. To a certain extent the differences in the PLIs for tobacco reflect different national regulations and tax regimes in the Western Balkan region. The Candidate Countries Croatia and Turkey have price levels for tobacco approaching those of some EU Member States. Turkey shows a very high PLI for alcoholic beverages (175). Generally, Croatia is the most expensive of the countries of the Western Balkan region and also more expensive than several EU Members (Bulgaria, Hungary, Romania, Slovenia), whereas the former Yugoslav Republic of Macedonia is the cheapest.

## Durables and semi-durables goods

**Table 2: Durables and semi-durable goods - Price level indices for 2006, EU27 = 100**

	Western Balkan countries				EU Candidate Countries			EU Member States						
	AL	BA	ME	RS	HR	MK	TR	AT	BG	EL	HU	IT	RO	SI
Clothing and footwear	85	93	105	88	106	68	74	102	66	101	87	104	82	101
Household furnishings, equipment and maintenance	67	60	68	71	85	62	67	100	55	96	64	107	61	85
Personal transport equipment	86	102	89	105	90	89	132	104	84	93	87	101	91	78

**Table 2** includes indices that are based to a large extent on prices for goods that are particularly determined by their brand and model (e.g. motor cars, household durables) or shop chain (e.g. men's and women's clothing). In general the PLIs for **Clothing and footwear** and **Personal transport equipment** for the four WBCs are much closer to the EU average than the PLIs for food and beverages presented in Table 1. Montenegro and Croatia form a cluster together with Austria, Greece, Italy and Slovenia, where clothing and footwear is more expensive than the EU average, again the former Yugoslav Republic of Macedonia showing the lowest prices. Apart from Turkey (132), the PLIs for **Personal transport equipment** are quite homogeneous, ranging from 78 (Slovenia) to 105 (Serbia). Typically,

price differences for transport equipment reflect differences in custom duties (where applicable) and taxes. PLIs here show often an inverse pattern than the overall level, lower income countries appearing more expensive than high-income countries. For example, two of the four WBCs, Serbia (105) and Bosnia-Herzegovina (102), have PLIs slightly above EU average - in the same cluster as Austria (104) and Italy (101). Regarding **Household furnishings, equipment and maintenance** all four WBCs as well as the former Yugoslav Republic of Macedonia fall in the same cluster with a price level of around 60 - 70% of the EU average. Various EU Member States (Hungary and Romania) and Turkey join that cluster. Croatia is clearly more expensive (85) and has the same price level as its neighbour Slovenia.

## Services

**Table 3: Services and infrastructure - Price level indices for 2006, EU27 = 100**

	Western Balkan countries				EU Candidate Countries			EU Member States						
	AL	BA	ME	RS	HR	MK	TR	AT	BG	EL	HU	IT	RO	SI
Housing, water, electricity, gas and other fuels	43	28	41	31	40	24	45	95	28	83	40	104	44	62
Health and education	20	33	26	28	50	23	46	112	20	77	43	119	29	73
Communication	90	46	48	31	80	74	99	96	95	111	85	104	85	74
Recreation and culture	55	53	56	49	74	54	69	101	44	92	60	104	53	82
Restaurants and hotels	56	57	62	60	83	43	75	98	35	90	60	101	51	68

The aggregates presented in **Table 3** refer to a variety of services. Due to the complex nature of services a comparison is more complicated than for goods. **Housing, water, electricity, gas and other fuels** covers a mix of services (housing) and non-durable goods (energy) and divides the four WBCs into two clusters: Albania and Montenegro have a similar comparative price level to Croatia, Hungary, Romania and Turkey. Bosnia-Herzegovina and Serbia join a cluster with Bulgaria and the former Yugoslav Republic of Macedonia which is the cheapest country in that respect. For **Health and Education**, Albania records the lowest PLI (20) within the WBCs, similar to the former Yugoslav Republic of Macedonia and the EU Member State Bulgaria. The dispersion of PLI is large and reflects, besides market developments and peculiarities of the products in the basket (e.g. pharmaceuticals), to a large extent the different salary costs in the related

sectors. The range of PLIs goes from approximately 20 (Albania) to around 120 (Italy); in other words: health and education is six times more expensive in Italy than in Albania. **Communication** offers a specific pattern: with the exception of Albania the WBCs show PLIs below 50, which is significantly lower than all neighbouring countries. Albania's PLI of 90 reaches a similar level as Austria, Bulgaria, Hungary and Romania. Croatia and the former Yugoslav Republic of Macedonia can be found in a cluster with Slovenia showing PLIs of about 75% of the EU average. The PLI-patterns of **Recreation and culture and Restaurants and hotels** are generally quite similar. The four WBCs have indices within a range of roughly 50 - 60% of the EU average. For restaurants and hotels the former Yugoslav Republic of Macedonia is cheaper than that group with an index of 43, only EU Member Bulgaria falling below (35).

## METHODOLOGICAL NOTES

### What are purchasing power parities (PPPs) and price level indices (PLIs)?

The indices in this publication are produced by the Eurostat-OECD Purchasing Power Parity programme. The full methodology used in this programme is described in the Eurostat-OECD Methodological manual on purchasing power parities which is available free of charge from the Eurostat website on

[http://epp.eurostat.ec.europa.eu/portal/page?\\_pageid=1073.46587259&\\_dad=portal&\\_schema=PORTAL&p\\_product\\_code=KS-BE-06-002](http://epp.eurostat.ec.europa.eu/portal/page?_pageid=1073.46587259&_dad=portal&_schema=PORTAL&p_product_code=KS-BE-06-002)

In their simplest form PPPs are nothing more than price relatives showing the ratio of prices in national currencies for an identical or comparable good or service in different countries. For example, if the price of a hamburger in Austria is 1.80 Euros and in Croatia it is 10 Kunas (HRK), the PPP for hamburgers between Austria and Croatia is 1.80 EUR to 10 HRK or 0.18 Euros to the Kuna. In other words, for every Kuna spent on hamburgers in Croatia, 0.18 Euros would have to be spent in Austria to obtain the same quantity and quality (or volume) of hamburgers. At the aggregate level, PPPs refer to comprehensive and representative baskets of goods and services.

Price level indices as presented in this publication are the ratios of PPPs to exchange rates. PLIs provide a measure of the differences in price levels between countries by indicating for a given product group the number of units of the common currency needed to buy the same volume of the product group in each country. PLIs are not intended to rank countries strictly since they are statistical constructs rather than precise measures. Like all statistics, they are point estimates with a certain "error margin". It is, therefore, preferable to use PLIs to identify clusters of countries having a comparable price level.

**Author:** This publication was prepared by Walter Gerdenits as consultant for ICON Public Sector Institute, Cologne.

### What is the European Comparison Programme (ECP) and how are consumer price surveys organised?

The ECP provides annual price and volume comparisons of final expenditure on GDP for the European Union's Member States, Acceding and Candidate Countries and EFTA associates. It is managed and co-ordinated by Eurostat. For the purposes of the collection of consumer prices, the 37 countries currently participating in the group co-ordinated by Eurostat are divided into four sub-groups with one of the participating countries acting as group leader: the Northern Group (group leader Finland), the Central Group (group leader Austria), the Southern Group (group leader Portugal) and the Western Balkan Group (logistically attached to the Central Group, group leader Slovenia). Each group has group-specific product lists for the consumer price surveys which are organised in a rolling cycle over three years. From 2006 the EU Candidate Countries Croatia and the former Yugoslav Republic of Macedonia joined the Central Group. To establish the 2006 results presented in this publication, data from surveys carried out during 2004, 2005 and 2006 were used, the former two extrapolated to 2006 levels using appropriate consumer price indices.

**Purchasing power parities for Western Balkan Countries (WBCs)** is a project of the 2003 regional programme for statistics for the WBCs covered by the Council regulation for Community assistance on Reconstruction, Development and Stability (CARDS). The objective of the project is to include the WBCs in the ECP so as to familiarise their statistical agencies with the methodological and organisational framework used for international comparisons of GDP within the European Union and to develop their capacity to participate regularly in future rounds of the ECP. For this purpose, the Western Balkan Group is logistically attached to the Central Group via Slovenia, participating in both groups and providing the link between them. The project is funded primarily by the EU through the regional CARDS programme. Technical oversight is provided by the OECD.

## Further information

**Data:** [Eurostat Website: http://ec.europa.eu/eurostat](http://ec.europa.eu/eurostat)

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