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European Price Statistics

An overview

2008 edition

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Luxembourg: Office for Official Publications of the European Communities, 2008

ISBN 978-92-79-07356-4
Cat. No. KS-70-07-038-EN-N
(Cat. No. printed publication KS-70-07-038-EN-C)

Theme: General and regional statistics
Collection: Statistical books

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The publication explains the methodologies and use of European price indices and helps economists and citizens alike to understand the main concepts of price statistics. The book shows and illustrates the price indices that exist in the Eurostat data bases and explains their relevance, their interrelationships and differences. Although the publication is illustrated by graphs and tables with statistical data, communicating the latest figures is not the primary objective.

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Data extracted at the beginning of October 2007, except: Energy statistics, Agriculture and Labour Market statistics – 14 November 2007.

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Introduction

This publication aims to help non-specialists and the general public to understand the main concepts of price statistics, and to learn about indices and prices and their relationship to the economy and to daily life. It seeks to provide an understanding of the need for different price indices and explains how each price index is linked to economic phenomena and policies.

The starting point for all statistics introduced in this publication are prices. A price is an amount of money paid by the buyer to the seller of a good or service or, in other words, a price is the money value of a good or service as agreed upon in a transaction. These transactions can comprise of any types of products, be they destined for consumers, producers or government. They can concern industrial goods, different kinds of services or agricultural products, as well as labour inputs or financial assets.

Altogether, prices and their interrelationships make up the system of prices, which affect all sections of society, and determine how resources are allocated. For example, to consumers the structure of prices indicates the terms on which they can acquire the goods on which they spend their money; to producers prices indicate the terms on which they may dispose of their goods and services or acquire the goods and services of others. Thus prices influence both the quantities of production and the patterns of consumption. However, prices of different commodities, and changes in prices, affect different parts of society differently. Therefore, it becomes necessary to compile different types of price statistics since each of them has their own importance and relevance for the economy.

Furthermore, prices of different products and product groups are closely observed by politicians and by the Central Banks in order to monitor the economy and to conduct monetary and economic policy, but also by industries and businesses to decide on investments, developments or market initiatives. Also the general public has a wide interest on price data. Consequently, price statistics have to satisfy this variety of needs, from general information about economic development to detailed information on specific market sectors.

Statistical offices have developed a range of price statistics to serve these user needs. Most of the current statistics are indicators of price changes over time, i.e. temporal price indexes, but also spatial price comparisons, either in absolute terms (average prices) or in relative terms (in particular purchasing power parities) are made available. The most important temporal price indices in the system of economic statistics are consumer price indices (in the EU - Harmonised Indices of Consumer Price Indices, HICPs), producer price indices, and export and import price indices. Complemented by indicators of labour costs and purchasing power parities (PPPs) these indices form the backbone of the system of price statistics in most countries. They provide an integrated and consistent view of price developments pertaining to production, consumption, and international transactions in goods and services.

The first chapter of this publication reviews some basic concepts concerning price statistics – the different formulae used in the calculation of indices, the meaning of the "consumer basket", the difference between a price index and price change, etc. Further chapters guide the reader through the various price statistics and indices available on the Eurostat website, which are the following:

- **Consumer price indices (CPIs**), which are the best known price indices, measure changes in the prices of goods and services from a consumer's perspective. CPIs are based on the prices of the goods and services which households typically buy. In order to ensure consistency of price indices at the European level, the **Harmonised Index of Consumer Prices (HICP)** was developed, which is a harmonised consumer price index for all EU countries and the official measure of consumer price inflation in the euro area.
- **Producer price indices (PPIs)** measure developments in producers' transaction prices, the gross monthly changes in the trading price of products and services on the domestic and the non-domestic market.
- **Import and export price indices** use data from the establishments surveyed in order to measure price developments of representative exported and imported items.
- **Purchasing Power Parities (PPPs)** compare price levels between countries or regions. They are used to convert prices expressed in national currencies into a kind of artificial common currency, in order to eliminate price level differences between countries or regions, and to be able to calculate the actual/real purchasing power of the resident population.
- **Labour cost indices (LCIs)** show the total cost for employers of employing the labour force on an hourly basis. The LCIs measure the cost pressure arising from the "labour production factor".

Price indices and price statistics have also been developed for major sectors of the economy and are presented in this publication. They include **agricultural price statistics (APS), energy price statistics, construction costs indices (CCIs)** and **services producer price indices (SPPIs)**.

1

Basic Concepts

Prices

The price of a good or service is simply defined as the value of one unit of that good or service. Prices are observable in transactions we all make every day. Price statistics may measure the level of prices or changes in prices.

The price of a good or service depends not only on the inherent characteristics of the good or service, but also where it is sold and in what condition. At a particular point of time prices of even identical products vary between shops. There are differences in quality. Moreover a good that emerges from a factory progressively changes its price as it moves through the economic system - by the addition of transport costs, trade margins and taxes (such as VAT) before it is finally bought by consumers.

Prices are generally determined on a market, according to the laws of supply and demand. Price statistics try to follow the development of prices as they are actually paid or received, i.e. the price paid by the customer (consumer price) or the price received by the producer of the good or service (producer price). For example, the taxi fare paid by a passenger is one example of a good used in calculating the consumer price index. The fare paid by the customer minus Value Added Tax (VAT) is the producer price received by the taxi operator.

The price of each good or service is made up of several cost factors, such as wages, materials, rents, depreciation, interest, energy and transportation. A cost index for taxi transportation would measure the price development of cost factors that the taxi entrepreneur has to pay in order to run his business, i.e. the price development of wages, fuel, cars, servicing, etc.

Price indices

A price index compares the prices of a set of products at different points in time, or at different locations. It therefore measures price changes or price differentials rather than price levels.

A price index shows how much must be paid for a set of products at some point in time relative to what would have been paid for the same set of products at another point in time, which latter is taken as the reference of the comparison. This is done by setting the index value for the reference or base year to 100 so-called index points.

For example, an index value of 123.4 for the current month compared to base year 2000, which has been set to equal 100.0, means that on average the prices of the products in question have increased by 23.4% since 2000. Similarly, an index value of 90.0 signifies a 10% decrease.

From a series of index numbers one can calculate the price change between any two periods. The year-on-year, or annual rate of inflation, for instance, is the percentage change in the price index for a given period compared to the index value recorded twelve months earlier. For example, for an index value of 183.1 for January 2004, and an index value of 178.4 recorded a year earlier in January 2003, the annual rate of inflation is:

Annual rate of inflation for January 2004 = $\left(\frac{183.1}{178.4} - 1\right) * 100 = 2.6\%$.

Similarly, one can compile month-on-month or average annual rates of change.

The basket

A change in the expenditure needed for purchasing a set of goods or services, i.e. the sum of money to be paid, can result from changes in the prices, or changes in the quantities, qualities or kinds of the goods and services purchased.

The aim of a price index is to measure the change in the expenditure or costs, across space or time, which is due only to changes in prices. The set of goods of services used to base the calculation of the price change is known as the 'basket of goods and service', or the 'consumer basket' if the index is to measure the changes in consumer prices. Depending on the kind of the price index, the basket must be representative of the goods and services acquired or consumed.

It would be simplest if prices changes could be measured on the basis of one and the same basket, i.e. a 'fixed basket', for all places or at all points in time. However in a modern economy this would not be practical since technologies, production systems, outlets and markets all change over time, products appear and disappear and purchasers' preferences evolve. For instance the new product called television first entered consumer markets in the middle of the last century. It used cathode tube technology and showed black and white pictures. Many years later it was superseded by colour TV, which is now being replaced by plasma and LCD TVs. This shows that baskets cannot be fixed over long periods of time, but need to be updated if price measurement is to remain relevant and accurate. Baskets need to be updated regularly, and are often updated on a yearly basis.

In order to aggregate, that is to add up the price change measured for each product in the basket, each price change must be given its relative importance of the products taking account of the total sum of money spent in the index base period. Price changes are 'weighted' according to the relative expenditures on the products covered by the index.

In order to illustrate this by means of a very simple example where it is assumed that, between the base year and the current period, the following price changes have been observed for a basket comprising three commodities - coffee, petrol and milk:

- 0.5 kilos of coffee at 4.00 € per kilo, then at 6.86 €
- 98 litres of petrol at 1.02 € per litre, then at 1.05 €
- 29 litres of milk at 1.38 €, then at 1.40 €.

In order to compile the price index for this basket, one needs to know the price index value and the relative expenditure weight for each commodity.

The relative expenditure weights can be expressed by taking for each commodity the quantity consumed in the base period times its price, divided by the total expenditure over the same period.

$$w_{coffee} = \left(\frac{2.00}{142.00} \right) = 0.014$$

As one can see, in this example, the weight for petrol is clearly higher than for the other commodities. This means that changes in petrol prices will have a much bigger impact on the total index than those of coffee and milk.

Each item index is usually calculated as the relative price level of each commodity in period t as compared to the base period, times 100. For instance the index for coffee is compiled as:

$$I_{coffee} = \frac{6.86}{4.00} * 100 = 171.50$$

The price change is $I_{coffee} = \left(\frac{6.86}{4.00} - 1 \right) * 100 = 71.50\%$

The table below lists the weights and indices for the three examples mentioned above:

Commodity	Expenditure	Weight	Prices t0	Index t0	Prices t1	Change	Index t1
Coffee	2.00	0.014	4.00	100	6.86	71.50%	171.50
Petrol	100.00	0.704	1.02	100	1.05	2.94%	102.94
Milk	40.00	0.282	1.38	100	1.40	1.45%	101.45
Totals	**142.00**	**1.000**		**100**			**103.49**

Item weights and indices can then be used to establish the total index ***I*** for these three commodities. This "all-items" index is usually compiled by multiplying each item index by its relative expenditure weight:

$$I_{all-items} = 171.50 * 0.014 + 102.94 * 0.704 + 101.45 * 0.282 = 103.49$$

The average price change measured on the basis this "basket" amounts to **103.49-100 = 3.49 index points.** Since the current period is compared directly to the base or reference period, this is equivalent to a 3.49**% percent price increase**.

Calculating price indices

The basic ideas of index calculation and the formulae used are simple: we want to know how much the total price of a basket of goods in a certain period differs from the total price of the same basket in another period, whether that is the previous month, the previous year or some other point in time.

Index formula

Price indices can be calculated using various formulae. Some of the most widely used are:

- **Laspeyres price index:** this index measures the price development of the basket consumed in the base period. The question it answers is how much a basket that consumers bought in the base period would cost in the current period. It is defined as a fixed-weight, or fixed-basket, index that uses the basket of goods and services and their weights from the base period. It is also known as a "base-weighted index".
- **Paasche price index:** this index measures the price development of the basket that is consumed in the current period. The question it answers is how much a basket that consumers buy in the current period would have cost in the base period. So it is also defined as a fixed-weight, or fixed-basket, index, but it uses the basket of goods and services and their weights from the current period. It is also known as a "current weighted index."
- **Fisher price index:** this price index uses both the baskets from the base and the current periods. It is defined as the (geometric) average of the Laspeyres price index and the Paasche price index.

The choice of the index formula to use often depends on the availability of data. The Laspeyres formula does not require information on the basket of the current period, while the other formulae do. Therefore the Laspeyres formula is very often used in practice in price statistics, which are often compiled and released rapidly - before consumption or production information for the current period has been collected. In fact it is the Laspeyres formula that has been used in the above example for a basket consisting of coffee, petrol and milk.

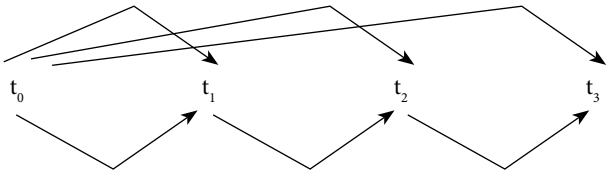
Fixed-base indices and chain indices

The formulae presented above apply to a comparison between a base period (0) and the current period (t). If we were to consider a series of periods, there are two ways of calculating the indices:

- The fixed-base method: the price changes between any of the periods are weighted with the value shares of one fixed base period (illustrated by the top arrows in the graph below). Since the difference between the baskets in the current period and the base period will become larger as time proceeds, it is necessary regularly to rebase the series and start with a new base period;

- The chaining method: the price changes between any period t and t+1 are weighted with the value shares of the most recent period for which information about the basket is available (lower arrows), i.e. the base period is moved forward by one every period. To calculate the change between, say, t_3 and t_0, the annual changes between these years are multiplied ("chain-linked").

Note that once we have a series of indices we can compute the price development between any two periods. It should be noted that when a fixed-base index is rebased, the index on the new base and the one on the previous base are usually chained together to generate a single price index.



Major uses of indices

Price and cost indices have many uses, for example:

- ***Measurement of inflation*** - Inflation or **the rise in the general level of prices over time** can be measured using a number of different indices. From assessing inflation faced by private households, the most suitable index is the **consumer price index**. For assessing inflation from the point of view of producers or importers of goods, the **producer price index** can be the most suitable measure of inflation for certain purposes. As for building construction and housing, on the other hand, the **construction cost index** may provide the most relevant picture of price trends in these industries.
- ***Calculation of real values*** (deflation) - If we use **nominal prices** to compare expenditures, wages and GDP figures for different time periods, the results obtained are difficult to interpret because the value of money has changed over time. This problem can be alleviated by converting these values into **constant prices**, i.e. into the money of one of the periods in question. It is also possible to calculate by how much wages or sales have increased in so-called real terms, i.e. over and above inflation.
- ***Calculation of indexed values*** - The purpose of an index clause is to tie the value of an economic commitment to an index so that the commitment maintains its value at the same level for the duration of the agreement. Common situations in which ordinary consumers are likely to find index clauses are rental agreements, insurance agreements, collective labour agreements and pension agreements. In business and industry, examples of index clauses include long-term delivery contracts, business and leasehold agreements, and some building and financial contracts are tied to various indices.

2

Consumer Price Indices

Prices influence virtually every area of households' lives and they are essential to all of us. How we live, what we eat, whether we travel by rail or car, where we go on holiday – prices are always important decision-making criteria. The issue of changing prices is something that we feel directly in our wallets. Consumer price statistics therefore play a key role by measuring the inflation faced by consumers, i.e. the changes over time in the prices of buying goods and services.

Consumer Price Indices (CPIs) measure therefore the changes over time in the prices of consumer goods and services acquired, used or paid for by households. CPIs aim to cover the whole set of goods and services consumed within the territory of a country by the population. A representative set of consumer goods and services is selected - the so-called "consumer basket" - in order to measure the price changes. Consumer goods and services include, for example, food, beverages, products for personal hygiene, newspapers and periodicals, expenditure on housing, water, electricity, gas and other fuels, health, transport, communications, education, restaurants and hotels. Many of these goods and services are bought frequently, or are consumed on a daily basis.

CPIs may be used for a wide variety of purposes, including: as a guide for monetary policy; for the indexation of commercial contracts, wages, social protection benefits or financial instruments; as a tool for deflating the national accounts or calculating changes in national consumption or living standards.

Harmonised index of consumer prices (HICP)

The HICPs are a set of EU Consumer Price Indices calculated according to a harmonised approach and a single set of definitions. The Harmonised Indices of Consumer Prices are designed primarily for the assessment of price stability in the euro area and convergence in European Union countries and for international comparisons of inflation. This does not mean that it should not or cannot be used by a wider range of users for other purposes.

The key HICPs are:

- The Monetary Union Index of Consumer Prices (MUICP) – aggregate indices covering the countries within the euro area;
- The European Index of Consumer Prices (EICP) – aggregates indices for all EU countries;
- The national HICPs – for each of the EU Member States.

The HICPs for the European Union and for the euro area are calculated by Eurostat using statistics provided by the Member States on price changes and the consumption patterns of consumers within their economic territories. Beyond these, there are also the European Economic Area Index of Consumer Prices (EEAICP), HICPs for individual EEA countries and interim HICPs for Turkey (candidate country).

Table 1: Harmonised indices of consumer prices
(Annual average rate of change - %)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
EU	1.7	1.3	1.2	1.9	2.2	2.1	2.0	2.0	2.2	2.2
Euro area	1.6	1.1	1.1	2.1	2.3	2.2	2.1	2.1	2.2	2.2
Belgium	1.5	0.9	1.1	2.7	2.4	1.6	1.5	1.9	2.5	2.3
Bulgaria	:	18.7	2.6	10.3	7.4	5.8	2.3	6.1	6.0	7.4
Czech Republic	8.0	9.7	1.8	3.9	4.5	1.4	-0.1	2.6	1.6	2.1
Denmark	2.0	1.3	2.1	2.7	2.3	2.4	2.0	0.9	1.7	1.9
Germany	1.5	0.6	0.6	1.4	1.9	1.4	1.0	1.8	1.9	1.8
Estonia	9.3	8.8	3.1	3.9	5.6	3.6	1.4	3.0	4.1	4.4
Ireland	1.3	2.1	2.5	5.3	4.0	4.7	4.0	2.3	2.2	2.7
Greece	5.4	4.5	2.1	2.9	3.7	3.9	3.4	3.0	3.5	3.3
Spain	1.9	1.8	2.2	3.5	2.8	3.6	3.1	3.1	3.4	3.6
France	1.3	0.7	0.6	1.8	1.8	1.9	2.2	2.3	1.9	1.9
Italy	1.9	2.0	1.7	2.6	2.3	2.6	2.8	2.3	2.2	2.2
Cyprus	3.3	2.3	1.1	4.9	2.0	2.8	4.0	1.9	2.0	2.2
Latvia	8.1	4.3	2.1	2.6	2.5	2.0	2.9	6.2	6.9	6.6
Lithuania	10.3	5.4	1.5	1.1	1.6	0.3	-1.1	1.2	2.7	3.8
Luxembourg	1.4	1.0	1.0	3.8	2.4	2.1	2.5	3.2	3.8	3.0
Hungary	18.5	14.2	10.0	10.0	9.1	5.2	4.7	6.8	3.5	4.0
Malta	3.9	3.7	2.3	3.0	2.5	2.6	1.9	2.7	2.5	2.6
Netherlands	1.9	1.8	2.0	2.3	5.1	3.9	2.2	1.4	1.5	1.7
Austria	1.2	0.8	0.5	2.0	2.3	1.7	1.3	2.0	2.1	1.7
Poland	15.0	11.8	7.2	10.1	5.3	1.9	0.7	3.6	2.2	1.3
Portugal	1.9	2.2	2.2	2.8	4.4	3.7	3.3	2.5	2.1	3.0
Romania	154.8	59.1	45.8	45.7	34.5	22.5	15.3	11.9	9.1	6.6
Slovenia	8.3	7.9	6.1	8.9	8.6	7.5	5.7	3.7	2.5	2.5
Slovakia	6.0	6.7	10.4	12.2	7.2	3.5	8.4	7.5	2.8	4.3
Finland	1.2	1.3	1.3	2.9	2.7	2.0	1.3	0.1	0.8	1.3
Sweden	1.8	1.0	0.5	1.3	2.7	1.9	2.3	1.0	0.8	1.5
United Kingdom	1.8	1.6	1.3	0.8	1.2	1.3	1.4	1.3	2.1	2.3
Iceland	1.8	1.3	2.1	4.4	6.6	5.3	1.4	2.3	1.4	4.6
Norway	2.6	2.0	2.1	3.0	2.7	0.8	2.0	0.6	1.5	2.5

Source: Eurostat (tec00027)

The HICPs are published each month to a rapid and pre-announced schedule - in general between 14 and 16 days after the end of each month. The HICP data which is released covers the price indices themselves, monthly and annual rates of change, and annual average price indices and rates of change. None of these are seasonally adjusted.

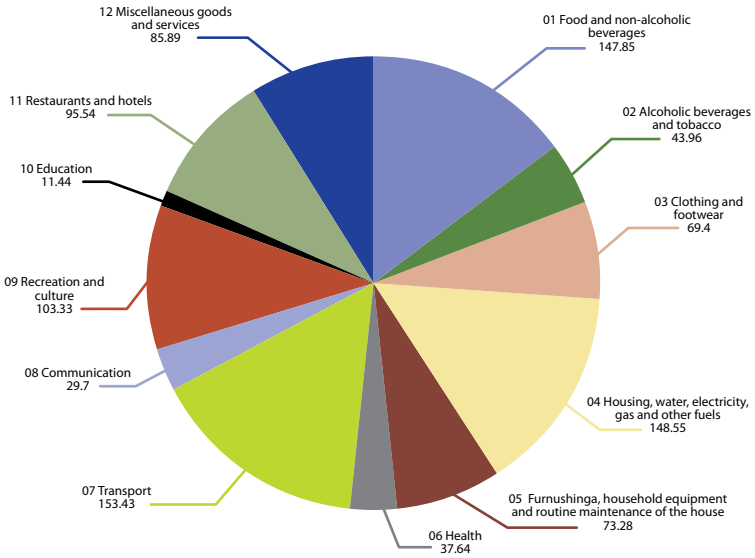
Eurostat also publishes each month a flash estimate for the euro area. This estimate is based on data from the first euro area countries which are able to provide national estimates and on energy price data. It gives an early indication of what the HICP for the euro area – the MUICP - is expected to show when the full data becomes available. The HICP flash estimate is generally released on the last working day of each month.

Computing and aggregating HICPs

The basket of goods and services and weighting

The HICPs cover household final monetary expenditure on goods and services purchased by all types of households. HICPs are classified according to the COICOP/HICP classification ("Classification of Individual Consumption by Purpose adapted to the needs of the HICP"). The COICOP/HICP classification categorised all products covered by the HICP. The main headings are: Food, Alcohol and tobacco, Clothing, Housing, Household equipment, Health, Transport, Communications, Recreation and culture, Education, Hotels and restaurants, and Miscellaneous (see details in annex).

Graph 1: Items weights, according to COICOP main headings, in the consumer basket
EU-27, 2006



Source: Eurostat (prc_hicp_inw)

The distribution of purchases of goods and services, and the precise description of some of the goods and services for which prices are collected, varies from country to country – there is no uniform "European basket". Data are collected according to expenditures which are representative in each country. Olive oil, for example, has a higher weight in the southern Member States than in the northern ones.

The table shows the extent of typical monthly price collection for the HICP.

Monthly price collection for the HICP				
	Observations	Outlets surveyed	Cities/municipalities surveyed	Items surveyed
Euro area total/average	1 758 786	195 150	1 417	713
EU total/average	2 735 338	307 877	2 365	763

Notes: Data collected in April 2007. Numbers of observations and outlets stated may exclude some specific price collections, for example rents and some tariffs; the comparison of the numbers of cities/municipalities is approximate.

The HICP covers monetary consumption expenditure by all consumers in the territory of a country, i.e. both residents and non-residents. It excludes interest and credit charges, since these are financing costs rather than consumption expenditure. The prices measured are those actually faced by consumers, so for example they include product taxes such as VAT and take into account price reductions in end-of-season sales.

As well as the all-items HICPs, a range of around 100 component indices for different goods and services are made available. A further 34 HICP special aggregates are also released, including for example the HICP excluding energy and the HICP excluding tobacco.

The MUICP and EICP are weighted averages for the euro area and the EU, respectively, which Eurostat calculates using HICP data series provided by the Member States. The resulting headline inflation corresponds to the average of all the goods and services in the HICP basket which, of course, does not correspond exactly to a particular consumer's expenditure.

Users should note that HICPs are revisable, i.e. indices may change after the first results are published. HICPs may be revised when provisional estimates are replaced by definitive data or if a need to make a correction is identified.

The harmonisation process

The development and production of the HICPs has been founded on the legal basis put in place. In October 1995 an EU Council Regulation set the legal basis for establishing a harmonised methodology for compiling comparable CPIs, as required by the convergence criteria in the Maastricht Treaty. This has been built on over the years using a series of seventeen, to date, legally binding implementing regulations, each addressing one or more specific areas of methodology. The process of harmonisation will continue in future years.

The methods specified in the HICP regulations can usually be applied with some flexibility, since in some cases different methods may be used provided their use would not lead to a difference in the all items HICP of more than 0.1 percentage points in either direction. The aim has been to achieve sufficient comparability of results rather than the application of uniform methods in all circumstances.

Quality adjustments

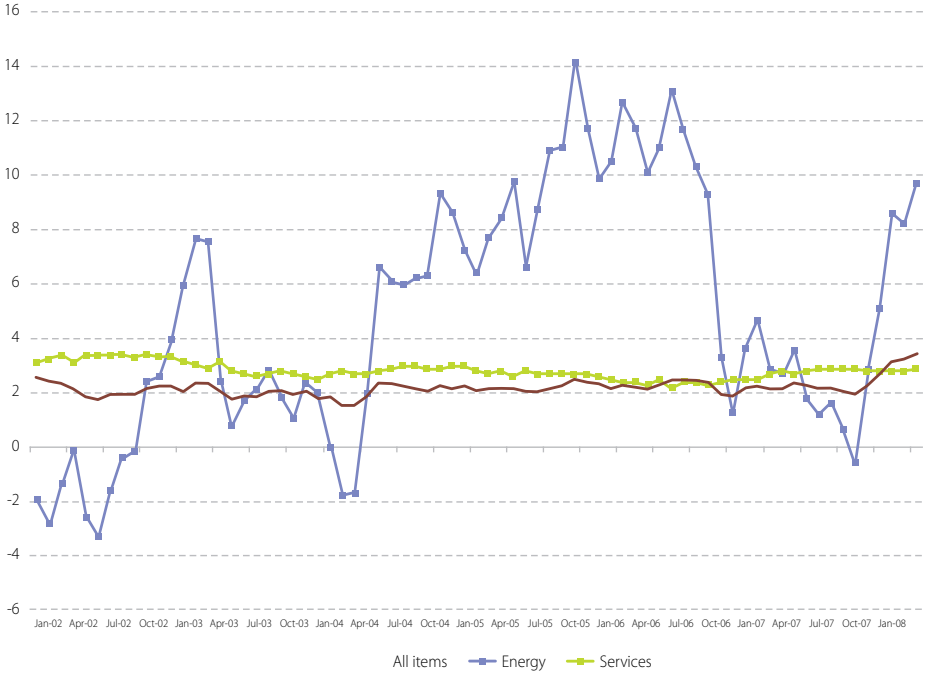
The need for quality adjustment in the calculation of price indices arises because the nature of the goods and services on the market changes over time. For example, it is not possible to simply compare the price of a particular car with a 'similar' one sold five years ago. In the mean time the quality of that car would have changed – the comparison of prices must take account of the quality change. The price statistician must therefore make a quality adjustment – that is, he or she must estimate what part of the total price change between the two cars was really due to a change in the quality of the car and what part is a genuine price change.

Quality adjustment is widely accepted by price index experts to be one of the most, if not the most, important and difficult issues in price index calculation. For the HICPs there are minimum standards for quality adjustment – explicit quality adjustments must be made whenever possible and the whole of a price change should never be ascribed to quality differences without justification. In practice all of the Member States make adjustments for the changing quality of goods and services in their HICPs – using a range of methods. Eurostat and the Member States' national statistical offices are at present developing further quality adjustment standards for the HICP. The aim is to agree concrete best practices for a range of specific goods and services and to eliminate over time the use of any quality adjustment methods which is judged to lead to unsatisfactory results in practice.

Owner-occupied housing

Prices for the consumption of the service provided by owner-occupied housing are currently excluded from the HICPs. Eurostat is currently carrying out extensive pilot work, together with the 27 Member States, on the use of an approach based on the acquisition costs of housing which is new to the household sector (mainly, this concerns newly-constructed dwellings). Indices will be compiled separately from the HICPs on an experimental basis before any decision is made to incorporate them within the HICPs.

Graph 2: HICP annual inflation rates for selected types of products, for EU.
January 2002-January 2008, Annual rates of change



Source: Eurostat (prc_hicp_aind)

The main differences between HICPs and CPIs

Both HICPs and CPIs measure the inflation faced by consumers, i.e. the changes over time in the prices of buying goods and services. HICPs and CPIs are for the most part based on the same data sources, but they measure inflation with different aims and therefore sometimes use different concepts or methods.

For the euro area, the HICP is mainly used for monetary policy purposes. The ECB defines price stability as a year-on-year increase of the HICP for the euro area of below, but close to, 2% over the medium term. The change in consumer prices, as measured by the HICP, is one of the convergence criteria used to assess whether a Member State is ready to join the euro area. These uses require a harmonised conceptual framework and comparable results. In addition, HICPs are being used increasingly for economic analyses in general and for indexation purposes.

Outside the euro area, CPIs play a role in some countries in the area of monetary policy and for economic analysis in general, but CPIs also have a wide range of other uses, such as for the in-

dexation of commercial contracts, wages, social protection benefits, and financial instruments. The range of uses made of CPIs varies across countries. As a result, methods of calculating CPI vary, and national CPIs are usually not regarded as comparable for cross-country analyses. For the EU, only the HICPs provide comparable measures of consumer price inflation.

The differences between HICPs and CPIs may sometimes be significant in practice, although in general the differences have been diminishing as national statistical offices have also adopted HICP standards for their CPIs. The main differences are as follows:

- The ***coverage of households***: The HICP covers households' expenditures taking place within the country, whether those households actually live in the country or whether they are merely visiting the country; it also covers institutional households (such as soldiers in barracks, patients in hospitals etc.). CPIs usually record expenditures by resident households, whether that takes place within the country or abroad and may exclude institutional households;
- The coverage and measurement of ***taxes and fees, and services*** – such as health, social protection, education and insurance services: The harmonised treatment of these expenditures is a major asset of the HICP. The HICPs measure the actual prices faced by consumers after taxes and duties, and net of reimbursements, for example in the case of medicines. CPIs may adopt different approaches, or exclude parts of such expenditures;
- The treatment of ***owner-occupied housing (OOH)***: Price changes for OOH are currently excluded from the HICP. In CPIs they may or may not be included, and where they are included the methods used differ substantially.

Access to the data

Eurostat publishes HICPs monthly, generally 14 to 16 days after the end of the reporting month, and publishes a flash estimate for the euro area on the last working day of the reference period. The data are announced via news releases and are available on the HICP section (Eurostat home page => Special topics: HICP => Data).

The HICP series begin in 1996 and are presented together on a common reference year: 2005=100. For more information, please refer to the country-specific information accessible via the metadata page "HICP Summary Methodology" (Eurostat home page => Special topics: HICP => Methodology => National HICP practices).

The complete list of the COICOP/HICP classification (basket) and special aggregates are accessible through the classifications server (RAMON) on Eurostat's website (Eurostat home page => Methodology => Eurostat's Metadata Server (Ramon)).

A specific HICP section is hosted on Eurostat's website, under "special topics." It gives easy access to a wide range of HICP information, such as: the links to the database, HICP legislation, publications, user support, Frequently Asked Questions, and information on key projects and methodological developments, such as owner-occupied housing, compliance monitoring visits to Member States and the Eurostat Work Programme on HICP.

3

Producer Price Indices

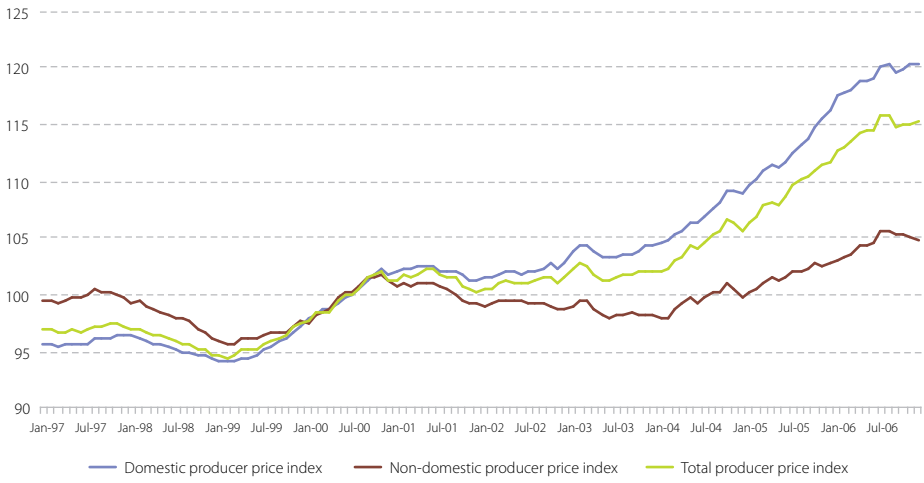
Producer price indices (PPIs, also called Output Price Indices) measure the gross monthly change in the trading price of products on the domestic and the non-domestic markets, at all stages of processing. When combined, the sub-indices for these two markets give the change in the PPI for a given product. The PPI is an output index – it measures price changes from manufacturers of a product. The price changes are measured from the perspective of the seller. The PPIs are used as an aspect of output for the seller and as a cost factor for the buyer.

The PPIs are currently available for industrial sectors. PPIs for services are under development and will be available by the end of 2008.

There are two sets of PPIs:

- ***Domestic producer price index*** – this measures the average price development of all goods resulting from an economic activity and sold on the domestic market;
- ***Non-domestic producer price index*** – this shows the average price development (converted to local currency) of all goods resulting from an economic activity and sold outside the domestic market.

Graph 3: Producer price indices, total industry (excluding construction), EU-27.



The data collection at European level results from the Short-Term Statistics Regulation (STS-R) which was adopted in 1998 and amended in 2005. In parallel to the adoption of the legal texts, Eurostat, with the help of Member States, has developed a methodological guide to ensure consistent data collection in all countries.

Definition

The following rules apply to the definition of prices:

- The appropriate price is the basic price, which excludes VAT and similar deductible taxes directly linked to turnover, as well as all duties and taxes on the goods and services invoiced by the unit, whereas any subsidies on products received by the producer should be added;
- If transport costs are included, this should be part of the product specification;
- In order to show the true development of price movements, it should be an actual transaction price, and not a list price;
- The output price index should take into account the quality changes in products;
- The price collected in period t should refer to orders booked during period t (time of the order), not when the commodities leave the factory gates;
- For output prices on the non-domestic market, the price should be calculated at national frontiers, FOB (free on board). This means that the seller pays for transportation of the goods to the port of shipment, plus loading costs, and the buyer pays freight, insurance, unloading costs and transportation from the port of destination to his factory.

All characteristics that determine the price- of the products - including quantity of units sold, transport provided, rebates, service conditions, guarantee conditions and destination - should be taken into account. The specification must be such that, in subsequent reference periods, the observation unit is able uniquely to identify the product and to provide the appropriate price per unit.

Uses of PPIs

Monthly measurement of output prices meets the need for information on the short- and medium-term economic activity of the Member States and the EU. The PPI data are widely used by both the business community and government, and enable monthly monitoring of prices at different stages of the manufacturing process. There are three major uses of PPIs:

- ***As an economic indicator*** –PPIs capture price movements prior to the retail level. Therefore, they may foreshadow subsequent price changes for businesses and consumers. They can be an early indicator of inflationary pressures in the economy. These data are used in formulating fiscal and monetary policies;
- ***As a deflator of other economic series*** –PPIs are used to adjust other economic time series for price changes;
- ***As the basis for contract price adjustments (escalation)*** –PPI data are commonly used in escalating purchase and sales contracts. These contracts typically specify amounts of money to be paid at some point in the future. It is often desirable to include an escalation clause that takes account of increases in input prices.

In many countries, there is a big demand for PPIs from the business and trade organisations. As these indices have already been in existence for decades, they are part of economic life for national accountants and businesses. For these uses they need to be maintained by the national statistical institutes at a detailed level. Many medium-sized and small countries calculate detailed PPIs beyond the requirements of the EU Regulation in order to satisfy a national demand.

Coverage and aggregations

All Member States are obliged to transmit data at 2-digit level of the NACE classification (a standard Classification of Economic Activities in the European Community, see Annex 1) for:

- Mining and quarrying (Section C);
- Manufacturing (Section D);
- Electricity, gas and water supply (Section E).

The PPI data are based on selling prices reported by establishments of all sizes selected as being representative of the whole population. Regular collection of prices data normally flows from a sample of units and a sample of their products. Data are generally collected using mainly postal questionnaires or by telephone surveys, and increasingly by electronic means.

The basic sampling method used varies from one national statistical authority to another (cut-off sampling or sampling proportional to size are applied) and depends on the market that is being studied – i.e. domestic or non-domestic. On the domestic market, the sample of enterprises is normally drawn from the Statistical Business Register. The observation units for the PPI for the non-domestic market are very often selected from external trade data. Samples for the PPI for the non-domestic market are generally much smaller than those for the domestic market.

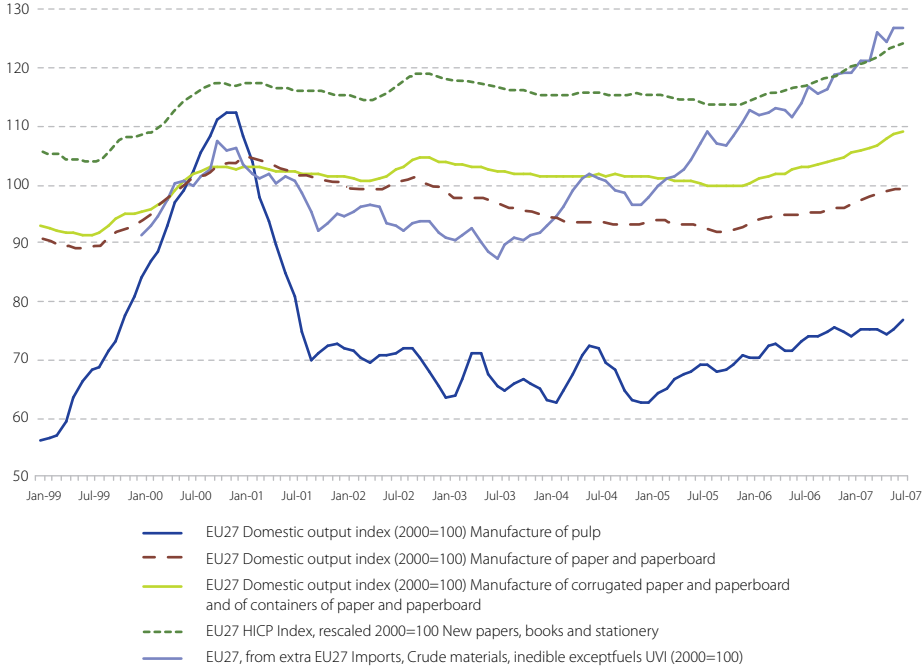
Weights are based on turnover information from the Structural Business Statistics database or on information coming directly from Member States. Weights and base years are revised every five years. The current base year is 2000.

Differences between PPIs and CPIs

It is often assumed that the direction and magnitude of price change in the PPI for finished goods prefigures a similar change in the CPI for all items. When this assumed relationship is contradicted by the actual movements of the two series, as it often is, many data users ask why the PPI and CPI show different price movements.

The answer is that conceptual and definitional differences between the PPI and CPI contribute to the differences in their price movements. Both the PPI and CPI measure price change over time for a fixed set of goods. A primary use of the PPI is to deflate revenue streams in order to measure real growth in output. A primary use of the CPI is to adjust income and expenditure streams for changes in the cost of living.

Graph 4: Comparison of producer and consumer price indices for paper products.



The different uses cause definitional differences that can be put into the following two main categories:

- ***The composition of the set of commodities and services*** – The target set of goods and services included in the PPIs is the entire marketed output of the producers. The set includes both goods and services purchased by other producers as inputs to their operations or as capital investment, and goods and services purchased by consumers either directly from the service producer or indirectly from a retailer. Because the PPI target is the output of the producers, imports are excluded. The target set of items included in the CPI is the set of goods and services purchased for consumption purposes by the households. This set includes imports;
- ***The types of prices collected for the included goods and services*** – The price collected for an item included in the PPIs is the revenue received by its producer. Sales and excise taxes are not included in the price because they do not represent revenue to the producer. The price collected for an item included in the CPI is the expenditure by a consumer for the item. Sales and excise taxes are included in the price because they are necessary expenditures by the consumer for the item.

Table 2: Index of total output prices, total industry (excl. construction), gross data.
Annual average price changes compared to previous year (%)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
EU-27	0.6	-1.0	-0.3	4.5	1.5	-0.4	0.8	2.4	4.6	4.9
Euro area	0.7	-0.9	-1.2	4.2	1.5	-0.6	0.5	1.9	3.5	4.4
Belgium	:	:	:	:	:	0.4	-0.5	4.4	2.6	5.0
Bulgaria	:	:	:	:	:	:	:	:	7.9	12.1
Czech Republic	4.9	4.7	0.7	5.2	2.2	-2.7	0.1	4.9	1.4	0.1
Denmark	1.7	-0.5	0.4	4.7	5.1	1.9	0.1	2.2	7.1	6.1
Germany	1.3	-0.3	-0.8	3.3	2.3	-0.3	1.0	1.2	3.3	4.2
Estonia	8.8	4.2	-1.2	4.9	4.4	0.4	0.2	2.9	2.1	4.5
Ireland	0.4	2.6	1.9	7.5	1.7	-1.1	-8.0	-2.3	0.1	1.1
Greece	2.9	2.7	2.1	7.5	2.8	2.0	1.6	3.9	5.3	6.1
Spain	:	:	:	:	:	:	:	:	:	:
France	-0.7	-1.7	-1.7	2.9	0.9	-1.2	0.2	1.7	2.6	2.9
Italy	:	:	:	:	:	:	:	:	:	:
Cyprus	:	:	:	:	1.2	2.0	2.8	5.4	4.9	4.1
Latvia	:	:	-4.0	0.6	1.7	0.9	3.2	8.6	7.8	10.4
Lithuania	:	:	1.7	15.9	-3.0	-2.8	-0.5	6.0	11.5	7.4
Luxembourg	:	1.7	-4.8	4.9	-0.2	-0.8	1.5	8.7	8.0	7.5
Hungary	:	:	5.1	11.6	5.1	-1.8	2.4	3.5	4.7	6.5
Netherlands	3.6	-2.8	-0.4	14.3	1.5	-1.7	1.3	3.5	7.9	7.6
Austria	-0.2	-0.4	-1.0	4.3	0.2	-1.1	-0.1	1.7	3.1	1.8
Poland	12.5	7.5	5.8	7.9	1.8	1.1	2.6	7.1	0.7	2.2
Portugal	:	:	:	:	:	:	:	:	:	:
Romania	:	:	:	:	38.1	-9.8	63.0	19.1	10.5	11.6
Slovenia	:	:	3.4	7.3	7.1	3.8	1.3	2.6	1.9	2.3
Slovakia	:	:	:	:	:	:	:	2.6	5.4	5.7
Finland	-0.4	-2.3	-5.0	2.5	-2.1	-3.0	-1.8	-0.1	1.9	4.6
Sweden	0.7	-1.0	-1.0	3.9	2.1	0.0	0.1	0.8	4.0	4.9
United Kingdom	-1.5	-3.2	1.3	4.7	-0.8	-0.6	1.7	3.7	10.5	7.4
Norway	0.5	-9.3	14.6	29.7	-2.7	-3.3	3.5	11.8	16.6	12.9
Switzerland	:	:	:	:	:	:	:	:	:	:

Source: Eurostat (ebt_inpp_a)

Access to the data

The industrial output price index is published monthly. Countries send data to Eurostat no later than one month and 5 days after the end of the reference period. Eurostat publishes the European price index one month and 5 days after the reference period.

Data, the latest publications and background information are available on the short-term business dedicated section on Eurostat website (Eurostat Website => Theme Industry, Trade and Services => Data => Industry, Trade and Services – horizontal view => Short Term Business statistics Monthly and Quarterly).

4

Import and Export Price Indices

International trade is an important part of world economy and has a particular importance for the economies of EU Member States. Precise figures on the trends in trade are essential for the monitoring of the economy. International trade statistics published by Eurostat are in current prices, i.e. in prices relevant to the reference period concerned. However, the development of trade flows over time is determined by variations in price and volume. It is necessary for a number of analytical purposes to distinguish these two elements. The availability of indicators on the development of import and export prices makes it possible to:

- Distinguish real growth of imports/exports from price changes in foreign trade statistics and the national accounts;
- Analyse competitiveness of countries or products in international markets;
- Analyse how changes in exchange rates are passed on to import and export prices;
- Forecast future prices in the domestic market.

There are two types of methods to measure the price development in international trade:

- ***Unit value indices (UVIs)*** – these are compiled from detailed import and export merchandise trade data, derived from customs declarations for extra-EU trade and from Intrastat reports for intra-EU trade;
- ***Price indices (XMPIs)*** – these use data from surveyed establishments on the prices of representative items exported and imported; the surveyed prices are those of items that are defined according to detailed specifications, in order that the change in prices of the same item specification can be measured over time.

Unit value indices (UVIs)

A traditional method of measuring the development of prices and volumes in international trade is to calculate Unit Value Indices (UVIs) based on detailed trade data. External trade data contain information on the values and quantities of goods traded between countries at a very detailed product and partner country level: therefore, by using appropriate index formulas, it is possible to calculate UVIs and corresponding volume indices.

Eurostat calculates UVIs for European aggregates (EU and euro area) and for the EU Member States using detailed intra- and extra-EU trade data provided by Member States. These data are available by 8-digit codes of the Combined Nomenclature (CN) and by partner countries. This is also the level at which elementary unit values (trade value divided by quantity) are calculated. There are about 10 000 eight-digit codes in use, which enables unit values to be calculated at a very detailed level.

Trade statistics apply harmonised principles in the valuation of goods. The statistical value is the value at the national frontier. It is an FOB value (free on board) for exports and a CIF value (cost, insurance, freight) for imports. For measuring quantity, the most common unit is the net mass. For some CN-codes quantity is also recorded in a supplementary unit, such as number of items, litres or cubic metres.

In the first stage of the calculation process, items that display extremely large unit value movements are excluded from the calculation of unit values. The same applies to items which are unsuitable for unit value measurement, for example ships or aeroplanes. After removing the outliers from the data, these elementary unit values are then divided by the average unit value of the previous year to obtain elementary unit-value indices. For products whose unit values are rejected, the changes are drawn up in line with those of similar products.

In the second stage, elementary unit value indices are then aggregated over countries and commodities, using the Laspeyres, Paasche and Fisher formulae. The UVIs disseminated by Eurostat are of the chained Fisher type. The chaining procedure has an advantage in that the weights used are more relevant to the periods measured and it also makes it easier to deal with the annual changes to the CN. In the final phase, the published indices are chained back to the reference year. The current reference year for the unit value and volume indices is 2000.

Many EU Member States also calculate UVIs, but these may differ from Eurostat UVIs. UVIs calculated by Member States may be based on a different methodology, the data at national level may differ from data available at Community level and breakdowns of published indices may not be same.

UVIs calculated by Eurostat have to support various Community needs. In order to ensure harmonised compilation of UVIs for European aggregates, Eurostat calculates these UVIs itself rather than constructing them from UVIs compiled by Member States. As all the detailed data needed for calculation are available, it is relatively easy to make changes to the classifications and breakdowns of disseminated indices, for instance in the case of EU enlargement.

Indices are available for both exports/dispatches and imports/arrivals for a large number of partner countries and geographic and economic zones, cross-analysed by various product classifications (SITC Rev 3, BEC and CPA).

Price indices

Another way to measure the development of price movements is to collect price quotations directly from the importers and exporters by means of a statistical survey. The price indices should track movements of consistent items over time. The collection, compilation and dissemination of the price indices are under the responsibility of the National Statistical Institutes.

Two kinds of price indices based on external trade data may be produced:

- ***Export Price Indices (XPIs)*** – these measure changes in the prices of the goods and services provided by the residents of a given economic territory/country and used by non-residents (the rest of the world). They are also known as "non-domestic output price indices";
- ***Import Price Indices (MPIs)*** – these measure changes in the prices of goods and services provided by non-residents (rest of the world) to residents (the economic territory or country).

Import Price Indices (MPIs)

The purpose of MPIs is to measure the monthly trends in the transaction price of imported goods and related services purchased from non-domestic areas by domestic residents. All characteristics that determine the price of the products are taken into account, including quantity of units sold, transport provided, rebates, service conditions, and terms of guarantee. Member States that have adopted the Euro as their currency are required to make a distinction between import prices from the euro area and from the non-euro area.

The following rules apply for the definition of import prices:

- The appropriate price is the price as paid by the observation unit that includes all duties and taxes on the goods and services to be borne by the observation unit, but excludes deductible taxes. Import taxes are therefore included in the price;
- In order to show the true trend of price movements, it should be an actual transaction price, and not a list price; therefore discounts should be deducted from the price. List prices may be acceptable only if actual transaction prices cannot be obtained;
- The price index should take into account quality changes in products;
- The price in period t should refer to orders booked during period t (moment of order), not the moment when the commodities leave the factory gates; transport costs should be calculated in a consistent way;
- Other characteristics of the products that determine transport price should also be treated in a consistent way. If service conditions change, for example, this should be reflected in an appropriate price change;
- Intra-company transfers should be taken into account provided that these transfers are based on prices, which are market based or market influenced;
- The transfer of ownership of boats and aircraft or similar products from a person established in a non-member country to a person established in the Member State in question counts as an import;

The basic sampling method used varies from one national statistical authority to another. It generally involves a three-stage sampling process: selecting a sample of product groups – (import headings); selecting a sample of enterprises or similar units under each import heading; and selecting specific commodities (items) to be priced.

Data are collected through various channels, such as self-administered questionnaires, touch-tone data entry, telephone interviews, e-mail surveys or a combination of these.

The formulas used for building up the indices are either a constant weight Laspeyres price index without annual chaining or an annually chained Laspeyres-type index. Weights in the constant weight Laspeyres index are chained every five years.

The main source of weights is foreign trade statistics, but some countries also use national accounts data. The methods used for dealing with quality changes, new products, disappearance of products and missing observations vary from country to country.

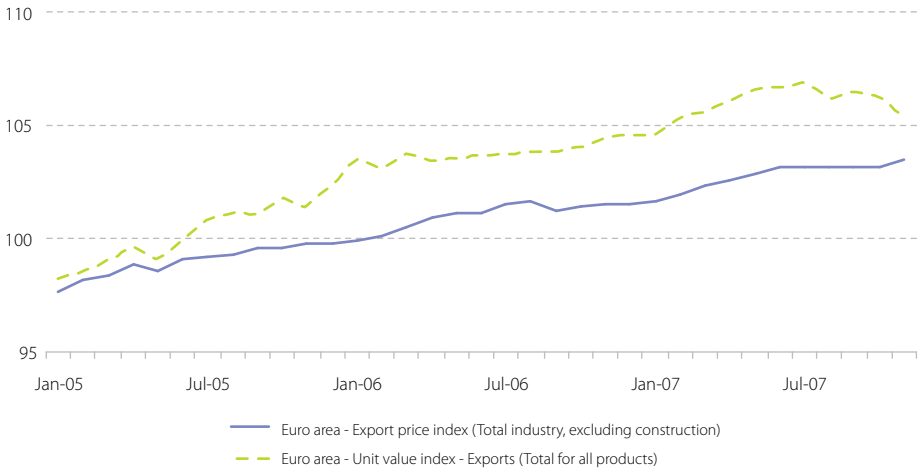
UVIs versus XPIs/MPIs

The price indices may prove to be much better indicators of price change than UVIs for commodities with large differences in characteristics and types, and commodities for which quality change is important: typical examples are ships, aircraft or computer equipment. The Short-Term Statistics regulation (STS-R) allows Member States to compile information on output prices for non-domestic markets and import prices using unit value indices for products originating from foreign trade or other sources. However, this use is only allowed if there is no significant deterioration in quality compared to specific price information. A few countries still rely on UVIs to compute part of the import/export prices indices.

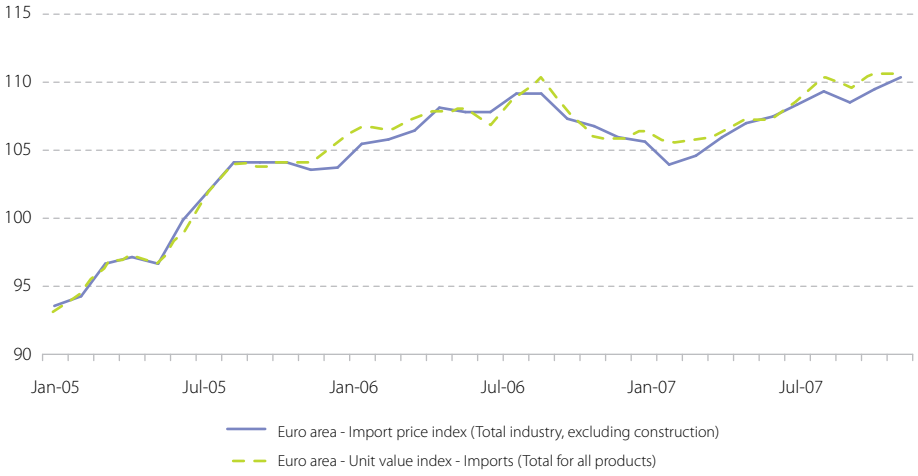
The cost of producing UVIs is much lower than for price indices, because UVIs data are obtained direct from customs administration documentation, whereas collecting specific prices for XPIs/MPIs involves all the expenses associated with a survey.

The coverage of UVIs is very nearly exhaustive, while price indices have to be based on samples.

Graph 5: Comparison of Unit Value Index for Exports with Export Price Index.
Trade between euro area countries and non-euro area countries
(2000=100)



Graph 6: Comparison of Unit Value Index for Imports with Import Price Index.
Trade between euro area countries and non-euro area countries
(2005=100)



Access to the data

UVIs are available on the Eurostat website, theme External Trade => Data => External trade aggregated data => External trade short-term indicators.

The import price indices for euro area Member States and export price indices are available on the Eurostat home page => Theme Industry, Trade and Services => Data => Industry, Trade and Services – horizontal view => Short Term Business statistics Monthly and Quarterly).

According to the regulation on Short Term Statistics, export and import price indices are published 45 days after the end of the reference period.

The Combined Nomenclature can be found on the Eurostat website => Methodology => Eurostat's Metadata Server (Ramon).

5

Purchasing Power Parities

Purchasing Power Parities (PPPs) are indicators of price level differences across countries. They indicate how many currency units a given quantity of goods and services will cost in different countries. PPPs can thus be used as currency conversion rates to convert expenditures expressed in national currencies into a common currency, eliminating differences in price levels across countries. This common currency is referred to as the Purchasing Power Standard (PPS). PPPs are the only indicators in this publication that are primarily designed for comparison between countries rather than for comparison over time.

The main use of PPPs is to convert national accounts aggregates, such as the Gross Domestic Product (GDP) of different countries, into comparable real expenditures. Applying nominal exchange rates in this process would mean that countries with high price levels would have their GDP overvalued relative to countries with low price levels. The use of PPPs ensures that the GDP of all the countries is valued at a uniform price level and thus only reflects differences in the actual volume of the economy.

Dividing PPPs by the nominal exchange rate gives a Price Level Index (PLI) for each country and product group. At the level of GDP, PLIs express the general price level of a given country relative to another country or group of countries.

Within the framework of the Eurostat/OECD PPP Programme, Eurostat is currently producing PPPs for the 27 EU Member States and 10 other European countries (three candidate countries, three member states of the European Free Trade Association, and four Western Balkan countries) on an annual basis, in close cooperation with the National Statistical Offices of the participating states. The Organisation for Economic Cooperation and Development (OECD) coordinates a similar exercise in the non-European OECD member countries. The OECD exercise is closely integrated with that of Eurostat.

Computation, aggregation and output

To compile PPPs, prices of a basket of comparable and representative goods and services are collected in all participating countries. For consumer products, about 3000 products in total are priced. In addition, information is gathered on prices for housing, investment goods (including construction services) and government services. The data collection for consumer goods and services is carried out in continuous cycles. Each cycle takes three years and comprises six surveys, two per year. This means that each product is priced once every three years.

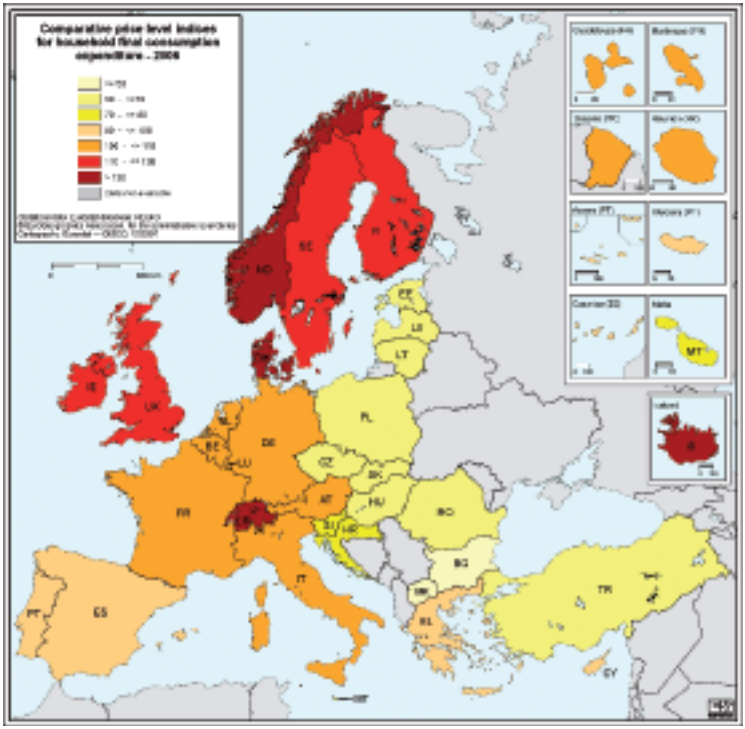
PPPs are calculated in three stages:

- ***At the product level*** – price relatives are calculated for individual goods and services;
- ***At the product group level*** – the price relatives calculated for the products in the group are averaged to obtain PPPs for the group;
- ***At the aggregation level*** – the PPPs for the product groups are weighted and averaged to obtain weighted PPPs for the aggregate. The weights used to aggregate the PPPs in this third stage are the national accounts expenditures for each product group.

Three sets of indices are typically derived using PPPs:

- ***Indices of real final expenditure*** – These are volume measures that reflect the relative magnitudes of the product groups or aggregates being compared. At the level of GDP they are used to compare the economic size of countries;
- ***Indices of real final expenditure per inhabitant*** – These are standardised measures of volume that reflect the relative levels of the product groups or aggregates being compared per head of the population. At the level of GDP they are often used to compare the economic well-being of the inhabitants of different countries;
- ***Comparative price levels*** – These are the ratios of PPPs to exchange rates. At the level of GDP they provide a measure of the differences in the general price levels of countries. The coefficient of variation of comparative price levels is applied as an indicator of price convergence among EU Member States.

Map 1: Comparative price level indices for household final consumption expenditure, EU-27, 2006.



Source: Eurostat (tec00027)

The most frequently used derived indicator is *real GDP per inhabitant,* which is the GDP per head of the population divided by the PPPs. An important use of this indicator is in the allocation of structural funds within the EU. Regions where real GDP per capita is less than 75 per cent of the EU average (taken over a period of three years) are eligible for support from the structural funds.

An example of the practical application of PPPs

In a given year, assume that the total GDP of France is 1 791 953 million euros and that of the United Kingdom 1 299 622 million pounds. Our task is to compare the relative size of the two countries' economies.

In order to make these figures comparable, we could decide to simply convert the GDP figure of the United Kingdom into euros at the nominal exchange rate of, say, 0.6817 pounds to the euro:

$$\frac{\text{GBP } 1299622}{0.6817} = \text{EUR } 1906443$$

The figures for France and the United Kingdom, expressed in euros, can now be used to calculate a value index for the two countries, with France as the arbitrarily chosen base country:

France:

$$\frac{1791953}{1791953} * 100 = 100$$

United Kingdom:

$$\frac{1906443}{1791953} * 100 = 106.4$$

Apparently, the United Kingdom economy is 6.4 per cent bigger than that of France. However, although the GDP figures of both countries are now expressed in euros, and thus are formally comparable, they overestimate the relative size of the United Kingdom economy. This is because, for both countries, they contain a price component and a volume component, while the price level of France is lower than that of the United Kingdom.

In order to avoid this bias, and to compare the volume component only, we convert the GDP of both countries into a common, artificial currency (PPS) and a common price level, using the PPPs from Eurostat's database instead of the nominal exchange rate:

France:

$$\frac{\text{EUR } 1791953}{1.0710} = \text{PPS } 1673159$$

United Kingdom:

$$\frac{\text{GBP}1299622}{0.7696} = \text{PPS } 1688698$$

These figures are expressed in the same currency and in the same prices, and thus represent real expenditures or volumes. They are only meaningful in a comparison across countries, and therefore should preferably be expressed as volume indices. The volume indices, again with France as the base country, can be calculated as follows:

France:

$$\frac{1673159}{1673159} * 100 = 100$$

United Kingdom:

$$\frac{1688698}{1673159} * 100 = 100.9$$

It thus appears that the United Kingdom economy is just 0.9 per cent bigger than that of France when the price level difference between the two countries is taken into account. In practice, a 0.9 per cent difference will not be considered as statistically or economically significant. We will therefore conclude that the GDP of the United Kingdom is of a similar magnitude to that of France.

A similar exercise can, of course, be undertaken with expenditure aggregates other than total GDP, such as household consumption expenditure, for example. For a per capita volume comparison, the per capita GDP or other expenditure in national currency should be converted using PPPs instead of nominal exchange rates as in the example above.

Table 3: GDP per capita in Purchasing Power Standards
at current prices (EU-27=100)

	2001	2002	2003	2004	2005	2006
EU-27	100	100	100	100	100	100
Euro area	113.8	112.9	112.1	111.1	111.0	110.2
Belgium	124.0	125.6	123.5	124.4	123.0	122.2
Bulgaria	29.4	31.1	32.6	33.6	35.2	37.1
Czech Republic	70.5	70.8	73.7	76.1	77.0	79.3
Denmark	128.4	129.0	124.7	124.5	126.3	126.6
Germany	117.1	115.7	117.1	116.1	114.6	113.6
Estonia	46.3	50.1	54.6	57.0	62.8	67.9
Ireland	133.1	138.5	141.1	142.4	144.0	142.8
Greece	79.0	83.0	83.9	84.9	86.9	88.4
Spain	98.5	100.9	101.4	100.9	102.5	102.4
France	116.2	116.5	112.3	112.1	114.2	112.8
Italy	118.3	112.4	111.2	107.6	105.4	103.7
Cyprus	91.3	89.5	89.1	91.3	93.6	93.2
Latvia	38.9	41.4	43.5	45.5	50.2	55.8
Lithuania	41.6	44.2	49.2	51.1	53.8	57.7
Luxembourg	235.1	241.3	247.7	252.7	263.0	278.6
Hungary	59.1	61.7	63.6	63.9	64.8	65.3

Malta	78.2	79.9	78.7	75.9	75.9	75.5
Netherlands	134.3	134.0	129.9	130.3	131.9	132.1
Austria	127.6	127.9	129.0	128.8	128.6	128.7
Poland	47.8	48.5	49.1	50.8	51.0	52.9
Portugal	77.6	77.4	77.0	75.2	75.4	74.4
Romania	27.6	29.4	31.5	33.6	34.4	37.6
Slovenia	79.0	81.3	82.5	85.0	86.6	88.8
Slovakia	52.6	54.5	55.2	56.7	59.8	62.7
Finland	116.2	115.7	113.5	115.9	114.5	116.3
Sweden	120.0	119.2	120.5	120.4	119.1	120.3
United Kingdom	118.1	118.9	120.0	121.8	119.6	119.1
Croatia	43.8	45.7	47.6	49.0	49.9	49.9
Former Yugoslav Republic of Macedonia	25.3	25.1	25.7	26.0	26.9	27.4
Turkey	26.5	27.3	27.0	27.9	28.5	29.4
Iceland	132.8	130.3	126.1	130.9	135.5	135.8
Norway	161.8	155.4	157.0	164.5	178.5	186.9
Switzerland	140.5	139.9	136.5	135.9	135.1	135.9

Source: Eurostat (tsieb011)

Access to the data

The PPPs are compiled on an annual basis. Twice a year, in June and December, the most recent price survey results and national accounts data are incorporated into the calculation. The PPPs, PLIs and volume indices for GDP, its main sub-aggregates and a selected number of so-called analytical categories are published in Eurostat's dissemination database.

Preliminary results are published 12 months after the end of the reference year. These preliminary results are revised twice, namely 12 months and 24 months after the end of the reference year. The final PPPs and PLIs are calculated after 36 months. These PPPs and PLIs are final inasmuch as the calculation will not be repeated to obtain new PPPs when countries subsequently revise their GDP estimates for the reference year.

PPP data are available on the Eurostat website => Economy and Finance => Data => Prices.

National Accounts Deflators

6

National accounts aggregates, such as the Gross Domestic Product (GDP), are compiled both at current prices and at constant prices. The constant price value of an aggregate is derived in a process called "deflation" in which the current price value is divided by a price index, the "deflator". Constant price values are also labelled "volumes" and express the value of the aggregate if the underlying quantities were to be multiplied by the prices of a base year.

The price indices used in the deflation process can be CPIs, PPIs, export and import price indices, etc. In the national accounts, the information from these different sources is compared and integrated to arrive at a single measure. The GDP deflator is often used as a general measure of inflation, as it encompasses all price changes in the economy, as experienced by households, businesses and governments alike. The deflator of household final consumption expenditure is an alternative measure of inflation as experienced by consumers. It may differ from the CPI because of differences in the coverage of goods and services, for methodological differences between CPI and national accounts, but also because the national accounts deflators incorporate information from other price statistics.

7

Labour Cost Index

The Labour Cost Index (LCI) is an essential part of the range of statistics that are relevant for an understanding of the inflationary process and the dynamics of the labour market. It measures the development over time of 'hourly labour cost'. 'Hourly labour cost' is the cost incurred by the employer in the employment of labour, divided by the number of hours worked in a given period. Information on labour costs is of major importance for economic and monetary policies, wage bargaining and economic analyses. Labour costs are an important potential source of inflation since they account for a large proportion of the total costs borne by private businesses, which may pass higher labour costs on to consumers via higher end prices, thus fuelling inflation. A timely labour cost index is therefore of the utmost importance for the European Central Bank in order for it to be able to monitor inflation in the euro area. To observe the progress of economic convergence, it is essential not only to be able to monitor labour cost on the European level but also to compare the development on the Member State level. Finally, information on the development and level of labour cost is relevant for social partners in the context of wage negotiations.

Eurostat has published the Labour Cost Index for all Member States, the euro area and the EU on a quarterly basis since 1996.

Computing and aggregation

The LCI shows the short-term development of the total cost to employers of employing the labour force on an hourly basis. In other words, the LCI measures the cost pressure arising from the production factor "labour". The LCI is defined as the Laspeyres index of labour costs per hour worked, chain linked annually and based upon a fixed structure of economic activity at NACE Rev.1 section level (see below). The current reference year of the index is 2000. In addition to the index numbers, annual and quarterly growth rates of labour cost are also calculated.

Data are available for the EU aggregates and for EU Member States. The LCI covers all production units in the NACE sections considered.

EU aggregates are obtained as weighted aggregates of the national data. The weights reflect the share of labour costs that each Member State has in the total EU aggregate. To calculate the weights, labour costs expressed in national currencies are converted into a common currency, the euro.

Data are broken down by cost items (Total cost, Wages and salaries, Other labour costs) and by economic activity (NACE sections).

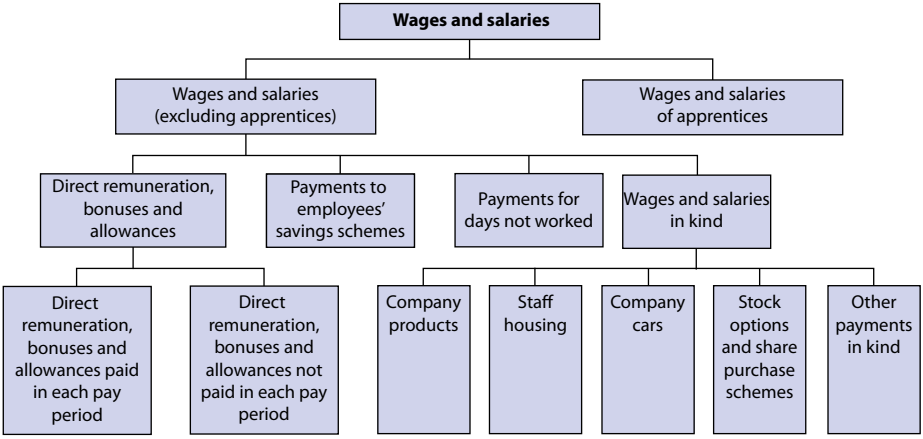
The term "labour costs" covers the following main components:

- Wages and salaries – including bonuses, pay for piecework, and shift work, allowances, fees, tips and gratuities, commission and remuneration in kind. They are recorded in the period during which the work is done. Ad hoc bonuses or other exceptional payments (13th month pay, back-dated pay arrears, etc.) are recorded when they are due to be paid. Figure 1 gives a schematic overview of further disaggregations.

- Other labour costs:
  - Employers' social contributions – for further disaggregation, see Figure 2;
  - Vocational training costs (excluding wages and salaries for apprentices) – expenditure on vocational training services and facilities (also those for apprentices, but not their wages and salaries), small repairs and maintenance of buildings and installations, excluding staff costs; expenditure on participation in courses; the fees of instructors from outside the enterprise; expenditure on teaching aids and tools used for training; sums paid by the enterprise to vocational training organisations, etc. Subsidies linked to vocational training should be deducted;
  - Other expenditure paid by the employer – recruitment costs (these are the sums paid to recruitment agencies, expenditure on job advertisements in the press, travel expenses paid to candidates called for interview, installation allowances paid to newly recruited staff, etc.) and working clothes provided by the employer. This does not include administrative running costs (office expenses, staff wages, etc.);
  - Taxes paid by the employer – this variable covers all taxes based on the wage and salary bill or on employment (these taxes are regarded as labour costs). This variable also covers penalty taxes (linked to employment) to be paid in some European countries by employers for employing too few handicapped persons, and similar taxes or fees;
  - Subsidies received by the employer are subtracted from the labour costs. Subsidies are all amounts received in the form of subsidies of a general nature intended to refund part or all of the cost of direct remuneration but not intended to cover social-security or vocational-training costs. They do not include refunds paid to the employer by social security institutions or supplementary insurance funds.

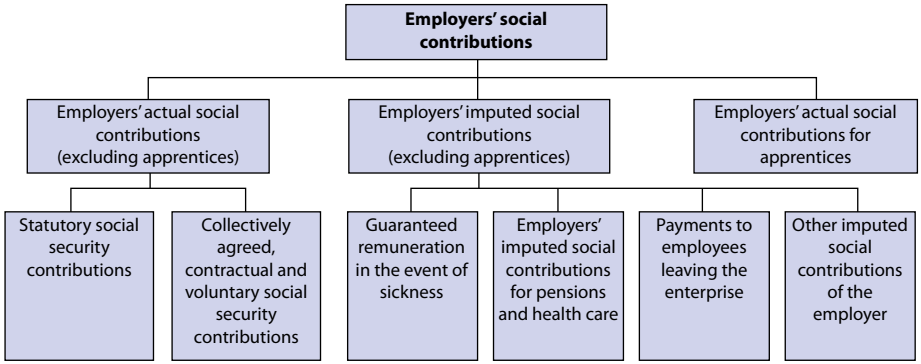
Disaggregation of the component "Wages and salaries"

Figure 1



Disaggregation of the component "Employers' social contributions"

Figure 2

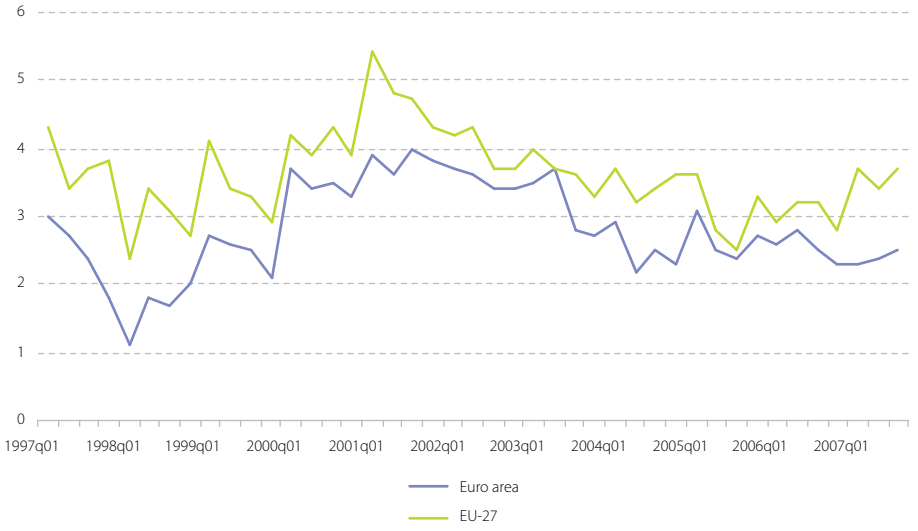


The LCI covers the following economic activities:

- Industry (NACE sections C to E): C - Mining and quarrying, D - Manufacturing, E - Electricity, gas, water supply.
- Construction (NACE section F);
- Services (NACE sections G to K): G -Wholesale and retail trade, repair of motor vehicles, personal and household goods, H -Hotels and restaurants, I -Transport, storage, communication, J - Financial intermediation, K - Real estate, renting, business activities;
- Non-market services (NACE sections L to O): L Public administration and defence, compulsory social security, M - Education, N - Health and social work, O - Other community, social and personal service activities (full coverage will be available starting from the first quarter of 2009).

All series are working-day adjusted; this means that differences in hourly labour cost which arise due to a varying number of working days are corrected for. Also, all series are available on a seasonally adjusted basis. Seasonal adjustment corrects for infra-annual variations in the labour cost index which can arise due to recurring events, such as new school and university graduates entering the labour market in the autumn.

Graph 7: Quarterly labour cost index.
Total nominal hourly labour costs, NACE C to K
% change compared to same quarter of previous year, working day adjusted



Source: Eurostat (lc_lci_q)

Table 4: Quarterly Labour Cost Index

(Total labour cost, NACE sections C-K; index for 2000=100)

	2005q02	2005q03	2005q04	2006q01	2006q02	2006q03	2006q04	2007q01	2007q02
EU-27	119.7	120.5	121.6	122.4	123.4	124.4	125.3	126.5	127.4
Euro area	116	116.8	117.7	118.4	119.1	119.8	120.5	121.2	121.9
Belgium	116.9	118	118.8	119.9	120.3	120.5	121.5	122.5	123.5
Bulgaria	131.1	133.2	134.9	135.1	137.5	141.3	143	153.5	156.6
Czech Republic	139	143.2	145.6	46.6	150.4	152.2	154.2	158.4	161.3
Denmark	119.2	119.6	121	121.9	122.7	123.3	124.4	125.6	127.1
Germany	109	109.5	109.8	110.7	111	111.4	111.5	111	112.3
Estonia	161.4	164.2	172.3	180	187.3	193.6	203.4	216.6	222.9
Ireland	129.6	130.8	132.8	133.3	135.2	137	139.5	140.3	142.6
Greece	127.2	126.6	126.7	135.9	142.1	142	137.9	143	145.7
Spain	125	126	127.2	128.6	130	131	132.2	133.7	134.3
France	118.3	119.1	120.7	122.4	122.5	122.9	124.9	127.1	126.8
Italy	117.1	118.1	119.8	119.9	120.4	:	:	:	:
Cyprus	129	130.2	131.9	133.2	134.6	136.6	138.8	142.6	144.5
Latvia	157.5	165.7	173.1	181.5	193.2	205.4	220.5	238.7	253.4
Lithuania	123	129	134.5	138.4	148.3	156	161.3	168.3	179.9
Luxembourg	120.1	120.4	122.2	122.2	123.3	124.1	124.3	126.3	126.9
Hungary	159.7	162.6	165	168.1	172.8	177.4	183.2	183.8	193.1
Malta	117.3	118.7	122.1	123.5	120.4	125.1	124.2	123	123.6
Netherlands	121.9	122.8	118.5	123	123.6	124	:	:	:
Austria	108.5	109	110.2	110.1	111.2	112.1	111.7	112.8	114
Poland	135.1	136.1	139.2	139.6	142.6	146.2	148.6	154.1	158.3
Portugal	119.6	121.4	120.1	122.1	120.8	121.4	123.7	125.5	125.6
Romania	:	:	:	:	:	:	:	:	:
Slovenia	141.5	145	146.3	149.3	151.9	150.7	158.9	156.4	160.4
Slovakia	156.4	159	161.7	166.3	167.2	171.8	175	176.9	179.8
Finland	124.3	126.7	127	126.6	127	130.3	129.7	130.4	130.3
Sweden	:	:	:	:	:	:	:	:	:
United Kingdom	126.4	127.2	131.5	128.5	131.6	132.8	135.6	136	137.3

Source: Eurostat (lc_lci_q)

Note: All series are seasonally and working day adjusted

Access to the data

Data are available in nominal and real terms (adjusted on the basis of harmonised consumer price indices) and seasonally adjusted and working-day adjusted forms. Index numbers and growth rates are made available for the total cost index as well as for the subdivisions wage and salaries and non-wage labour cost by economic activity. From the first quarter of 2009 onwards, the overall index will cover the economic activities NACE sections C-O; until then the overall index will cover NACE sections C-K.

New data are released every quarter, about 75 days after the end of the reference quarter.

Index levels and quarterly changes are available from the Eurostat home page => theme Population and social conditions => Data => Labour market.

8

Energy Price Statistics

Reliable and affordable energy supply is a key element of all national economies. Rapidly changing energy prices are a major concern for industries and households alike. In order to monitor the situation, energy statistics contain a wide range of energy prices.

Information on gas and electricity prices is collected for both household and industrial consumers. The collection of gas and electricity prices for industrial consumers is an obligation for all EU Member States, as defined in Council Directive 90/377/EEC[1]. The price data for gas and electricity for household consumers are collected on a voluntary basis. Prices for unleaded fuel and diesel oil are collected by the Directorate-General for Energy and Transport (DG TREN) weekly. Pump prices from all EU Member States (currently excluding Bulgaria and Romania) are available on the Eurostat website on a monthly basis.

Computing and aggregation

The surveys on electricity and gas prices are based on the system of standard consumers, i.e. the prices are recorded for certain levels of electricity/gas consumption and under certain conditions of supply, chosen as being representative of the population of electricity/gas consumers. These standard levels of consumption remain fixed from one year to the next and for all the countries, this being one of the primary conditions for spatial and temporal comparability of prices.

Prices are originally collected in national currencies per kilowatt-hour (kWh) for electricity and per gigajoule (GJ) for natural gas. For non-euro countries, they are converted into EUR per kWh and GJ using the monthly average exchange rates (average exchange rate for January or for July respectively). The data for pump prices for Euro Super 95, automotive gas oil and heating gas oil are expressed in euro per thousand litres. The data for residual fuel oil are expressed in euro per tonne.

All prices are shown per unit sold and the results represent the unit price actually paid at the beginning of each period and take account of the relevant tariff, parameter, index, etc. applicable as from 1 January/1 July.

Two sets of data are extracted:

- ***Data expressed in national currencies*** are used for single-country time series analysis;
- ***Data expressed in euro*** are used for cross-country comparisons and aggregations.

Three price levels are shown:

- The price inclusive of all taxes – this corresponds to the sum paid by the end-user;
- The price excluding VAT;
- The price net of tax – the tax is obtained directly from the tariffs or contracts.

[1] A new methodology for the collection of industrial gas and electricity prices was adopted by the European Commission in June 2007 and will come into force from January 2008

For the purpose of international comparisons, prices expressed in national currencies are converted to common monetary units. Two common units are used:

- The European Currency Unit (ECU) up to July 1998 and the euro since January 1999;
- The purchasing power standard (PPS).

Electricity prices

Two groups of standard consumers are selected:

- ***Domestic standard consumers*** (coded Da to De): each category is characterised by specified annual consumption and standard dwelling, and is expected to possess specific household facilities and appliances;

Household Standard Consumer	Annual consumption kWh		Approx. subscribed demand in kW	Standard dwelling
	Total	of which night		
Da	600	-	3	50 m² 2 rooms + kitchen
Db	1 200	-	3-4	70 m² 3 rooms + kitchen
Dc	3 500	(1 300)	4-9	90 m² 4 rooms + kitchen
Dd	7 500	(2 500)	6-9	100 m² 4-5 rooms + kitchen
De	20 000	(15 000)	9	120 m² 5 rooms + kitchen

As a guide, these standard consumers may be expected to possess the following household facilities and appliances:

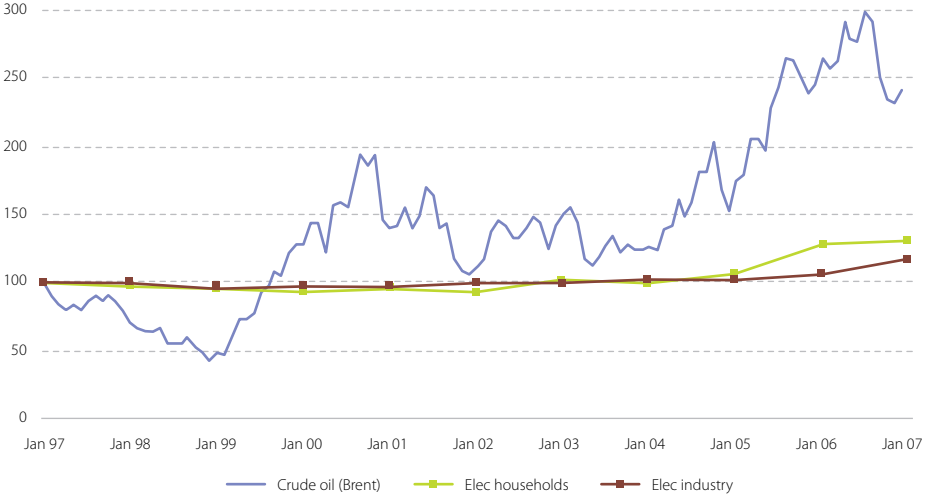
- ***Da*** – Lighting, radio, television, refrigerator, small electric appliances (e.g. vacuum cleaner, electric toaster, hair dryer, food mixer, coffee grinder, etc.);
- ***Db*** – as for Da, plus washing machine or dishwasher;
- ***Dc and Dd*** – as for Db with washing machine and dishwasher, plus storage heater for water;
- ***De*** – "all-electric" system with water heater and electric central heating operating on a storage basis.
- ***Industrial standard consumers*** – users with an annual consumption above 30 000 kWh. Industrial standard consumers are grouped into 9 categories Ia to Ii. This grouping is based exclusively on the amount of annual consumption.

The price of electricity is to some extent influenced by the price of primary fuels and more recently also by the cost of carbon dioxide (CO_2) emission certificates. It is likely that higher prices for electricity will provide an incentive for greater energy efficiency and lower levels of carbon emissions.

Since 1 July 2004, European industrial consumers have been free to choose their electricity supplier. In 2007 this concept was extended to all consumers within the EU.

Graph 8: Development of the average price of one kWh electricity EU-15 (1997=100)

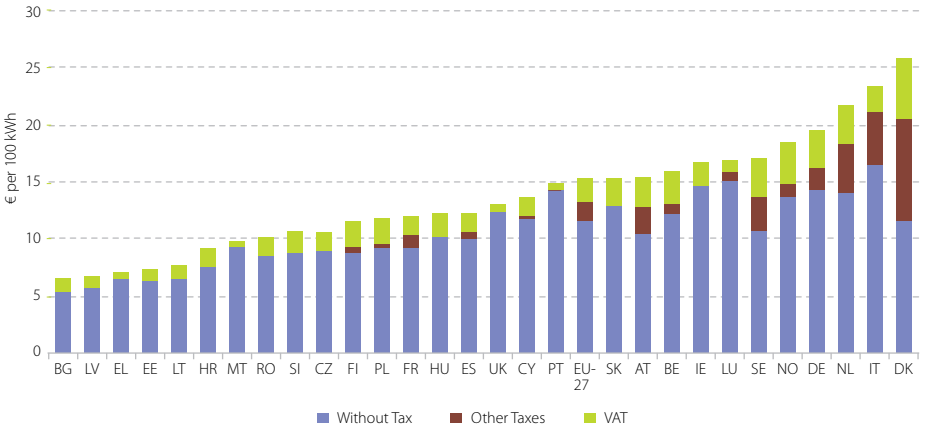
Based on standard household consumer Dc (3500 kWh/year) and on standard industrial consumer (2000 MWh/year) on 1 January of each year (prices in EUR)



Source: Eurostat and INSEE

Graph 9: Composition of electricity prices for household consumers on 1 January 2007 (in EUR per 100 kWh).

Standard consumer with annual consumption of 3 500 kWh.

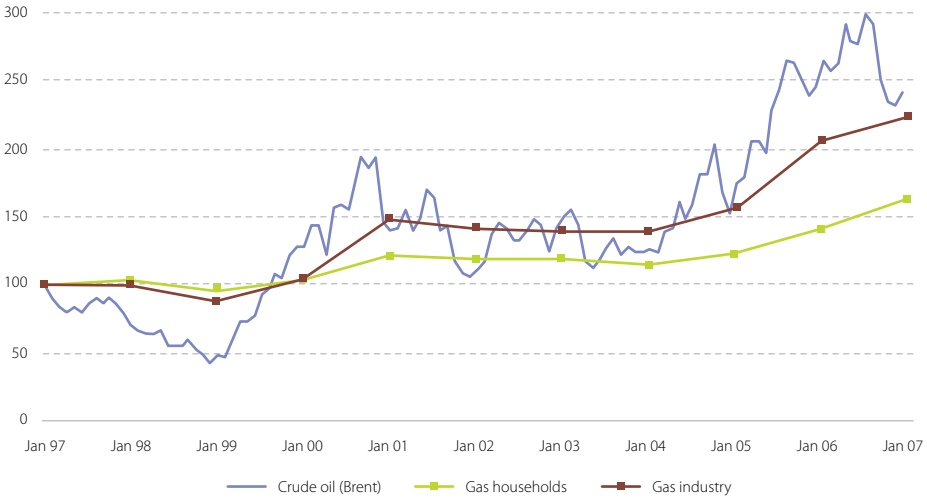


Gas prices

For the calculation of gas prices, two families of standard consumers are considered:

- ***Domestic consumers*** – these are small users (households, commercial, crafts, offices, etc.). The domestic standard consumers are characterized principally by the annual volume of consumption;
- ***Industrial consumers*** – these are medium and large users (industries, large commercial or administrative buildings, etc.). For industrial uses, in addition to the annual quantity consumed, the regularity with which the user takes gas from the network is also considered. All the prices recorded for standard industrial consumers normally relate to non-interruptible supplies, i.e. the seller of gas must supply the quantities demanded by the consumer.

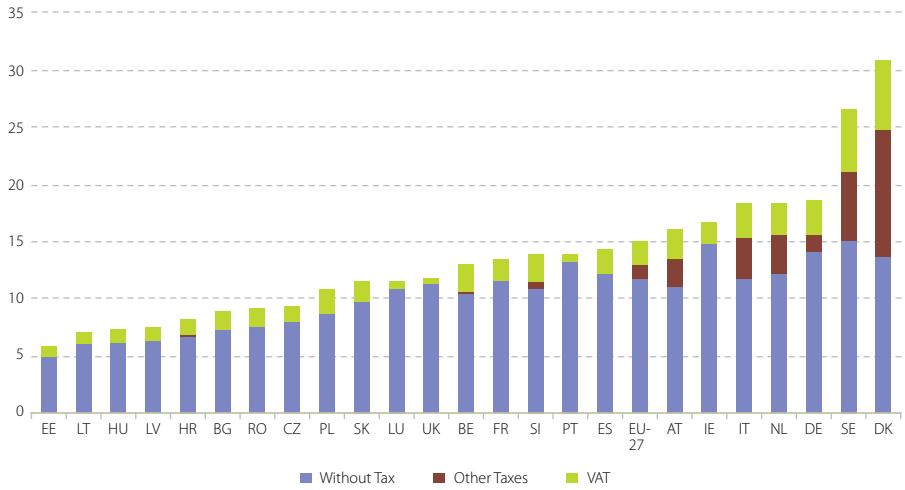
Graph 10: Development of the average price of 1 GJ of natural gas EU-15 (1997=100).
Based on standard domestic consumer D3 (83.70 GJ/year) and on standard industrial consumer I 3-1 (41 860 GJ/year) on 1 January of each year.



Source: Eurostat and INSEE

Gas prices also followed a downwards during much of the 1990s. This trend ceased at the end of the decade, when prices either changed relatively little or rose.

Graph 11: Composition of the gas prices for household consumers on 1 January 2007 (in EUR per GJ).
Standard consumer D3: annual consumption of 83.7 GJ

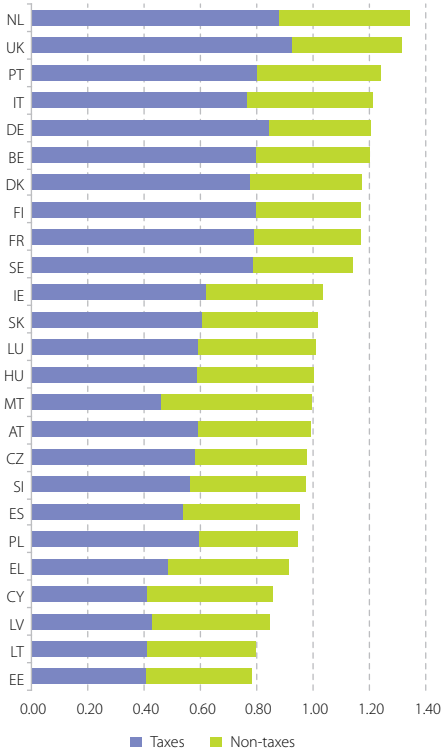


Gas prices are measured in much the same way as prices for electricity, with taxes and VAT included for household consumers. The prices shown correspond to one GJ (gross calorific value) which is equivalent to approximately 28.4 cubic metres (for Dutch gas).

Pump prices

As with electricity and gas prices, the recent trend in the prices of unleaded petrol and diesel has been upwards. The contribution of taxes to the price per litre of petrol has been considerable in each of the Member States, often accounting for more than half of the cost price.

Graph 12: Prices of unleaded gasoline 95 ROZ on 15th January 2007.
in EUR per litre



Graph 13: Prices of automotive diesel on 15th January 2007.
in EUR per litre

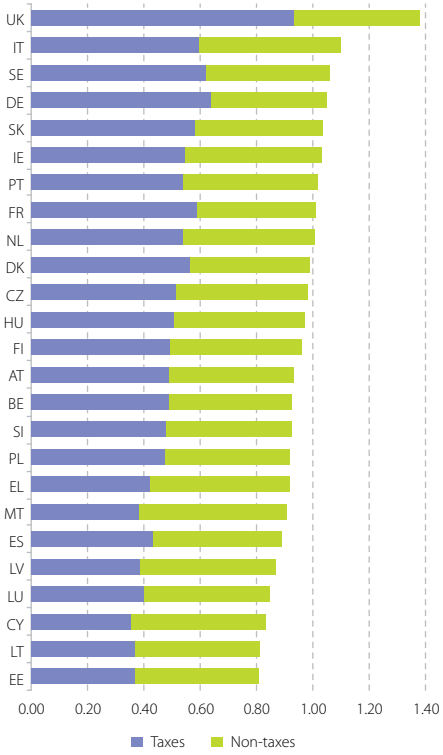


Table 5: Prices of unleaded gasoline 95 Roz at the pump on 15 January of each year.
(in national currency per litre)

	2003	2004	2005	2006	2007
BE	0.737	0.731	0.854	1.029	0.927
CZ	:	:	24.707	27.851	27.271
DK	6.380	6.130	6.760	8.020	7.360
DE	0.904	0.876	0.970	1.094	1.047
EE	:	:	10.900	13.453	12.684
IE	0.787	0.796	0.949	1.078	1.032
EL	0.657	0.642	0.774	0.919	0.916
ES	0.723	0.701	0.808	0.930	0.891
FR	0.818	0.791	0.914	1.054	1.011
IT	0.895	0.876	1.004	1.157	1.098
CY	:	:	0.420	0.499	0.481
LV	:	:	0.489	0.595	0.603
LT	:	:	2.469	3.033	2.808
LU	0.652	0.622	0.724	0.881	0.847
HU	:	:	230.956	255.626	246.307
MT	:	:	0.359	0.405	0.389
NL	0.803	0.826	0.909	1.043	1.007
AT	0.748	0.727	0.836	1.052	0.935
PL	:	:	3.387	3.687	3.559
PT	0.700	0.700	0.834	1.196	1.019
SI	:	:	0.816	0.914	0.924
SK	:	:	33.730	38.970	35.925
FI	0.818	0.776	0.876	0.997	0.960
SE	7.890	7.760	8.830	10.550	9.640
UK	0.764	0.779	0.839	0.932	0.916

Table 6: Prices of automotive diesel at the pump on 15 January of each year.
(in national currency per litre)

	2003	2004	2005	2006	2007
BE	0.983	0.992	1.069	1.305	1.201
CZ	:	:	24.519	28.137	27.213
DK	8.230	7.980	8.170	9.450	8.740
DE	1.110	1.077	1.111	1.262	1.205
EE	:	:	10.540	13.168	12.238
IE	0.869	0.870	0.941	1.076	1.034
EL	0.753	0.738	0.767	0.941	0.912
ES	0.832	0.805	0.844	1.001	0.950
FR	1.046	0.997	1.038	1.220	1.169
IT	1.070	1.048	1.088	1.260	1.208
CY	:	:	0.440	0.513	0.498
LV	:	:	0.499	0.595	0.589
LT	:	:	2.445	3.073	2.750
LU	0.788	0.826	0.902	1.066	1.009
HU	:	:	236.073	264.006	253.617
MT	:	:	0.375	0.466	0.426
NL	1.159	1.188	1.248	1.407	1.342
AT	0.899	0.858	0.910	1.052	0.989
PL	:	:	3.570	3.705	3.658
PT	0.950	0.950	0.996	1.196	1.239
SI	:	:	0.821	0.918	0.974
SK	:	:	33.070	39.110	35.331
FI	1.084	1.052	1.143	1.232	1.169
SE	9.373	9.310	9.980	11.240	10.340
UK	0.750	0.762	0.789	0.890	0.871

Access to the data

Statistics on electricity and gas prices are presented as a snapshot as at 1 January and 1 July of each year.

Energy Price Statistics are available from the Eurostat home page => theme Environment and energy => Energy

9

Agricultural Price Statistics

Agricultural price statistics (APS) is an essential tool to analyse and monitor the Common Agricultural Policy (CAP). The information on the prices of products and on the means of agricultural production is indispensable in order to follow up EU agricultural trends (in particular the agriculture markets), to take the necessary corrective measures, to monitor their effects and to evaluate the results.

Agricultural price statistics are drawn up from the farmers' viewpoint. They measure the prices of agricultural products (output) paid to the farmers and the means of agricultural production (input) paid by the farmers (as farm gate prices). The data collected include:

- ***The Agricultural price indices (API)*** – quarterly and annual data based on the sales of agricultural products and on the purchases of the means of agricultural production;
- ***The Absolute agricultural prices (AAP)*** – annual data for a limited number of agricultural products

The base year for agricultural indices is changed every five years. A rebasing is done for the years ending in "0" and in "5". The current base year is 2000=100.

Eurostat also receives data on agricultural land prices and rents. In most of the Member States these data come from administrative sources, namely data recorded by the land registration services or tax authorities. Since they refer to factors of production, these data are managed separately. Data on agricultural rents are collected in most countries by means of special surveys. The level and trend of agricultural rents are of interest as an indicator of the rate of return of land.

Computing and aggregation

Unlike other major components of agricultural statistics, Agricultural price statistics are based on voluntary agreements between Eurostat and the Member States. The foundations for these were laid down in the early seventies.

The national authorities of the Member States (National Statistical Offices and/or Ministries of Agriculture) collect absolute prices, calculate corresponding average prices and agricultural price indices for their country, and periodically update the weights. Currently the list of prices covers 201 agricultural products for AAP (95 on crop production, 33 on animal production and 67 on input items). For price indices, prices are collected for 80 output products and for 41 input items.

In order to allow comparisons between the Member States, the agricultural prices expressed in national currency are converted into euro[2] using the fixed exchange rates or the financial market exchange rates. For the purpose of calculating aggregated EU indices (for 27, 25, 15, etc. countries), the individual Member States indices are obtained by Eurostat using weighting coefficients based on the Purchasing Power Standards (PPS) of each country.

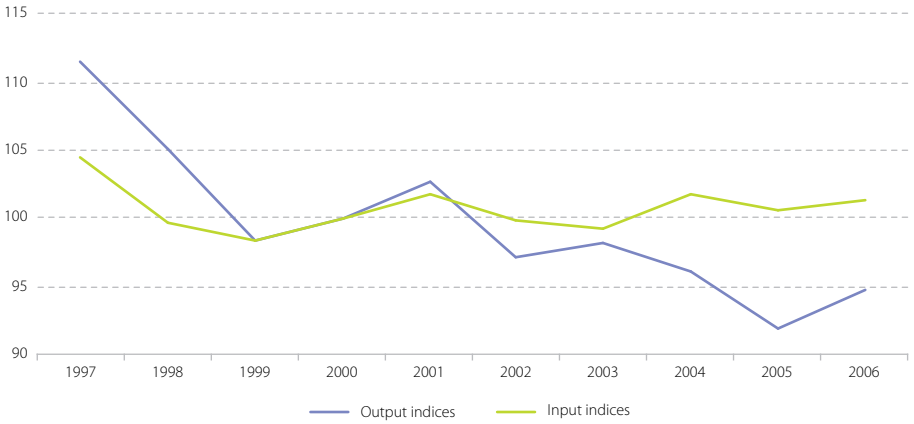
[2] The euro has been used since January 1999, the ECU (European Currency Unit) from April 1979 to December 1998, and the EUA (European Unit of Account) before April 1979.

Agricultural price indices (APIs)

The main objectives of APIs are to allow comparison of price trends both between Member States and the EU as a whole and between the various agricultural products within a Member State or within the EU. APIs are also used for the comparisons of trends in producer prices and trends in purchase prices of the inputs to the farms.

The indices are calculated on a quarterly and on an annual basis.

Graph 14: EU-27 Deflated Output and Input Indices for the agricultural production.

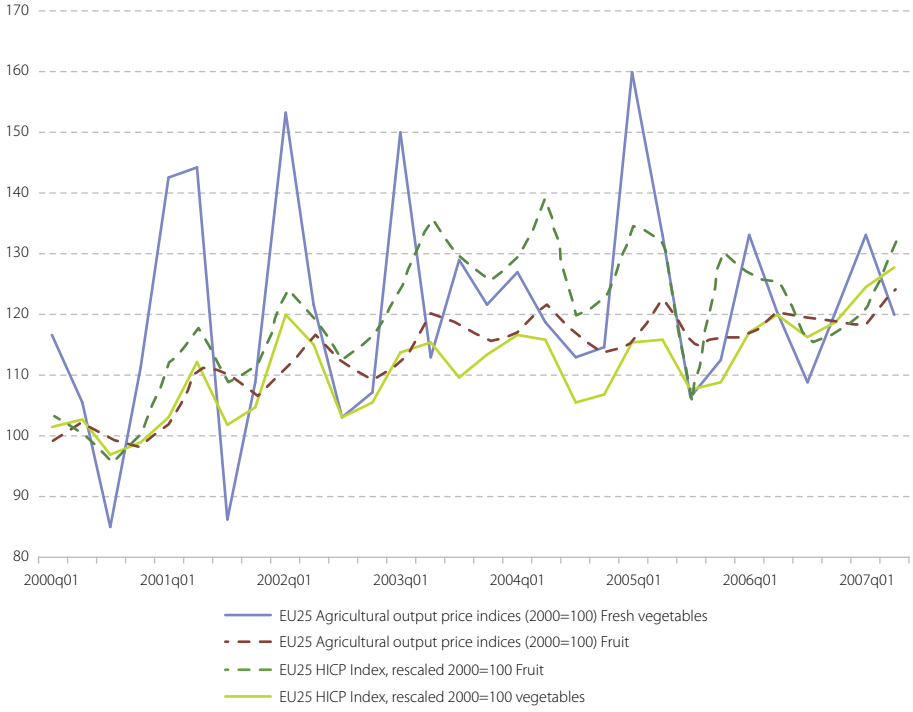


Source: Eurostat (tag00047, apri_pi00_ina)

The EU APIs, which Eurostat collects and publishes in co-operation with the Member States, comprise:

- Output indices: The price indices of agricultural products,
- Input indices: The price indices of the means of agricultural production (i.e. animal feed, fertilisers, electricity and fuels)

Graph 15: Comparison of agricultural output prices with consumer prices.



Source: Eurostat (apri_pi00_outq)

The agricultural price indices are obtained by a base-weighted Laspeyres calculation, in which the value weight attached to each elementary index over the base period is equal to the value of the sales of this product (excluding VAT) in the output index and to the expenditure incurred by farmers in purchasing the means of agricultural production for the input index. In the case of highly seasonal products, such as fresh fruit and fresh vegetables, it was decided, for the quarterly indices, to use the method of variable baskets with fixed quarterly weights in the base year. For each of the two groups, each Member State determines quarterly baskets of representative products.

Table 7: Producer price indices, deflated, of total agricultural production.
(2000=100)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
EU-27	111.5	105.1	98.4	100.0	102.7	97.1	98.2	96.1	92.0	94.7
Belgium	110.2	102.5	93.0	100.0	102.0	91.0	92.5	92.7	91.4	97.7
Bulgaria	127.3	111.5	98.0	100.0	108.0	90.2	90.1	94.3	76.6	74.0
Czech Republic	117.7	109.8	95.2	100.0	106.1	94.4	91.0	94.7	86.9	85.9
Denmark	113.2	98.3	92.1	100.0	105.0	92.4	86.5	88.0	85.2	89.0
Germany	108.1	102.3	95.5	100.0	105.2	96.9	97.1	93.9	91.3	97.6
Estonia	:	:	:	100.0	:	:	:	117.4	118.0	117.9
Ireland	108.8	105.8	98.9	100.0	100.4	91.8	87.9	87.9	86.4	88.3
Greece	106.8	101.0	99.0	100.0	102.4	105.5	110.9	105.6	105.2	108.5
Spain	109.4	104.6	99.0	100.0	100.2	94.2	96.3	94.4	94.2	90.1
France	104.9	104.1	100.1	100.0	101.7	96.3	97.7	93.8	88.1	90.9
Italy	112.6	106.7	100.2	100.0	103.4	102.0	105.4	101.1	93.7	94.5
Cyprus	:	:	:	100.0	:	:	:	109.0	107.6	111.1
Latvia	122.3	112.3	99.8	100.0	105.9	102.1	97.3	108.6	114.9	116.1
Lithuania	129.5	115.2	106.3	100.0	113.0	112.1	101.1	100.9	111.2	126.4
Luxembourg	108.8	107.1	103.0	100.0	99.4	95.2	93.8	92.3	92.4	92.2
Hungary	106.9	96.2	89.7	100.0	97.2	90.8	92.0	81.4	79.2	84.2
Malta	:	:	:	100.0	106.7	104.9	98.9	89.7	85.9	84.3
Netherlands	110.5	102.9	95.0	100.0	100.9	95.0	94.0	88.0	87.9	96.3
Austria	111.0	102.3	95.5	100.0	104.3	97.8	96.9	94.5	93.5	96.6
Poland	121.6	107.0	94.6	100.0	96.5	88.3	89.3	94.4	90.6	96.2
Portugal	106.1	105.1	98.0	100.0	106.3	96.5	100.2	97.1	93.3	93.6
Romania	142.0	123.9	98.7	100.0	104.3	106.6	100.6	108.6	93.1	95.6
Slovenia	117.4	109.2	102.5	100.0	100.4	94.2	92.0	87.8	86.8	88.5
Slovakia	125.9	117.7	104.6	100.0	100.8	96.3	84.4	80.3	76.2	73.0
Finland	108.3	105.7	99.5	100.0	102.5	99.0	93.3	96.0	92.4	95.2
Sweden	107.4	104.6	102.5	100.0	102.4	97.7	94.0	91.6	89.4	91.9
United Kingdom	121.5	109.3	104.5	100.0	107.0	100.8	105.8	107.5	102.3	104.7

Source: Eurostat (tag00047)

Table 8: Purchase price indices, deflated, of total means of agricultural production.
(2000=100)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
EU-27	103.6	99.5	98.5	100.0	100.4	97.6	96.7	98.9	99.8	98.5
Belgium	102.4	98.0	96.3	100.0	100.1	99.1	97.8	96.2	97.3	98.3
Bulgaria	:	:	:	:	:	:	:	:	:	:
Czech Republic	113.2	102.5	94.4	100.0	100.1	97.4	96.0	99.8	98.6	98.9
Denmark	106.5	103.6	99.8	100.0	103.5	102.2	99.0	101.2	101.0	100.9
Germany	100.3	96.9	95.8	100.0	102.1	100.3	99.5	101.3	99.8	100.9
Estonia	:	:	:	:	:	:	:	:	:	:
Ireland	104.0	100.5	99.4	100.0	100.4	97.5	96.0	97.1	98.9	100.1
Greece	100.3	97.8	97.6	100.0	98.4	97.4	97.9	102.2	103.8	104.5
Spain	104.1	101.7	98.2	100.0	100.0	97.4	95.7	96.5	95.1	94.9
France	102.0	99.2	97.7	100.0	101.3	99.9	99.0	100.3	100.3	101.5
Italy	113.7	104.9	98.8	100.0	102.1	100.7	100.8	103.4	99.1	100.0
Cyprus	:	:	:	100.0	:	:	:	128.6	136.0	135.8
Latvia	104.0	102.9	101.3	100.0	99.2	97.9	99.1	100.9	111.3	113.5
Lithuania	:	:	:	100.0	94.9	98.5	95.2	91.1	96.5	99.9
Luxembourg	101.4	100.5	99.9	100.0	101.1	100.3	99.1	98.8	94.7	93.2
Hungary	100.7	95.1	94.7	100.0	102.5	98.3	99.7	100.8	97.4	99.0
Malta	:	:	:	100.0	98.3	96.7	94.7	98.0	98.1	95.2
Netherlands	103.3	99.0	96.6	100.0	100.9	98.2	97.7	97.9	97.9	101.9
Austria	102.4	99.4	98.7	100.0	99.6	97.6	98.2	99.6	98.8	99.9
Poland	95.0	94.3	96.8	100.0	101.2	101.6	103.9	107.8	108.0	107.0
Portugal	106.2	101.1	99.0	100.0	100.1	96.4	94.5	96.1	97.3	95.8
Romania	:	:	:	:	:	:	:	:	:	:
Slovenia	110.2	101.1	96.8	100.0	103.1	98.9	98.1	103.0	101.9	102.9
Slovakia	111.9	109.1	102.8	100.0	:	:	:	89.2	87.5	88.4
Finland	103.1	100.3	97.8	100.0	99.6	98.2	98.2	100.8	103.5	107.1
Sweden	100.7	98.1	97.5	100.0	102.4	102.3	102.1	104.9	105.8	107.0
United Kingdom	108.5	101.7	99.3	100.0	102.3	100.6	102.0	107.1	107.1	108.2

Source: Eurostat (tag00053)

Agricultural absolute prices (AAP)

Agricultural absolute prices are primarily used for:

- Comparison of price levels between Member States and studying the sales channels;
- Economic analysis – AAP (especially aggregated prices) are needed for many model calculations and for estimating price elasticity.

This means that two objectives have to be met. The first is that absolute prices need to be comparable between Member States. The second is that the products for which the prices are to be recorded have to be of economic relevance for the respective Member State. These objectives are not necessarily compatible, and some compromises are required.

In principle, the agricultural prices collected by Eurostat are net of VAT. Prices in some Member States contain only non-deductible or non-refundable VAT on certain means of production. The same applies to other product-linked levies and subsidies.

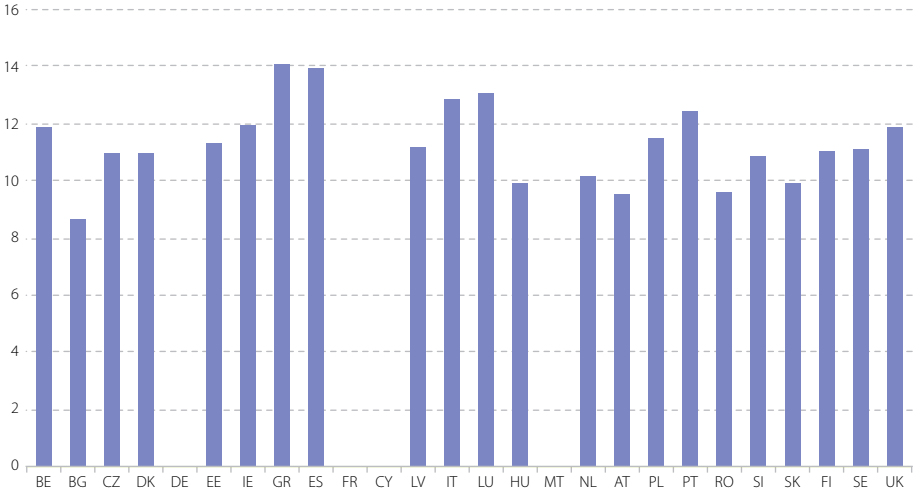
The agricultural prices expressed in national currency are converted into euro in order to allow comparisons between Member States.

Prices are obtained from a wide variety of sources, such as:

- Samples to producers who sell direct;
- Records of transactions as part of an administrative process;
- Surveys of bodies collecting or purchasing the produce.

Although prices are observed on a monthly and annual basis, Eurostat collects and disseminates only annual absolute prices.

Graph 16: Selling price of common wheat, 2006.
(EUR/100 kg)



Source: Eurostat (apri_ap_crpouta)

Access to the data

Agricultural Price Statistics are available from the Eurostat home page => theme Agriculture and fisheries => Agriculture =>Agricultural Prices and Price Indices.

10

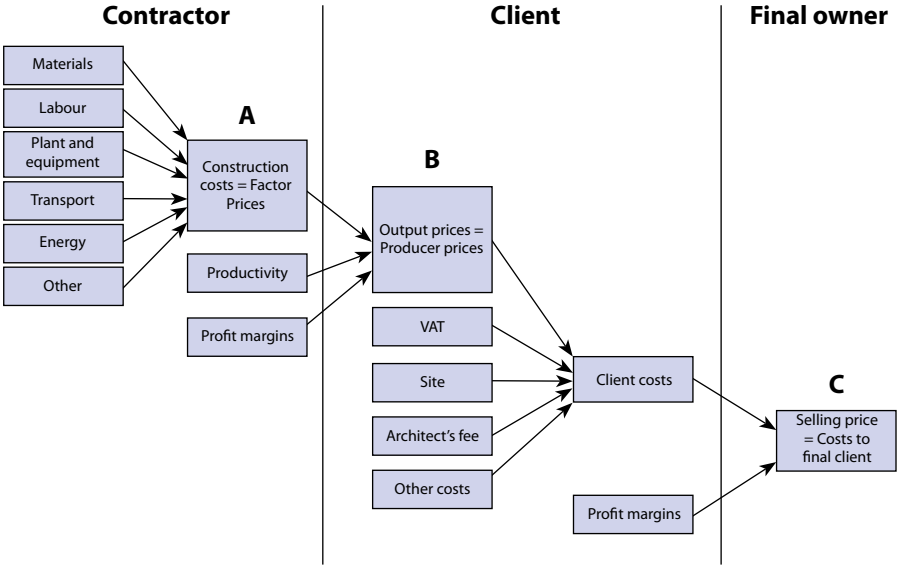
Construction Cost Index

The Construction Cost Index (CCI) is a business cycle indicator showing the trend in the costs incurred by the contractor in the construction process.

The CCI can be regarded as a combination of component costs indices (material costs and labour costs) which shows the developments in the price of the main factors of production used in the construction process.

In the context of construction statistics, the focus of attention is on the pattern of prices in the construction activity. For this reason, the terms "Cost index" and "Price index" will be considered from the point of view of the contractors – since the actual construction process is in their hands.

Figure 3:



The CCI (see A in the diagram) shows the trend in the costs incurred by the contractor in carrying out the construction process; it is also referred to as a "factor price index" or a "construction input price index". The output price index (see B in the diagram) shows the development of prices paid by the client to the contractor; it is also referred to as a "producer price index". The CCI measures the relationship between the costs, at constant technology and constant input mix, that are associated with the implementation of a fixed amount of construction work.

This type of index is different from an output price index, which measures movements in prices charged to clients of construction work. This is especially true when the price index is calculated

from tender prices, which can vary from time to time and place to place depending on the state of competition and market conditions. Output price indices include changes both in productivity and in the contractor's margins. This corresponds to item B in the diagram above.

These two indices can be distinguished from the "selling price index" (item C in the diagram above) which measures changes in the prices paid by the final owner of the output to the client. It includes the price of the land, architect's fees and client's margins.

Computing and aggregation

The CCI is made up of aggregated price indices for materials, labour costs and other types of costs. For any given reference period, the construction cost index is calculated as the weighted sum of the material costs indices and the labour costs indices for the construction sector.

The component costs index (material costs and labour costs) shows the price developments of production factors used in the construction industry. Plant and equipment, transport, energy and other costs are also components of the construction costs. Architect's fees are not part of the construction costs.

The material costs index is generally calculated using materials prices. Prices of materials should be based on actual prices rather than list prices. They should also be based on a sample of products and suppliers. Prices are exclusive of VAT.

The labour cost index for the construction sector should cover wages and salaries and social security charges for all persons employed in the construction sector. Social security charges include: statutory social contributions payable by the employer; collectively agreed, contractual and voluntary social contributions payable by the employer; and imputed social contributions (social benefits paid directly by the employer).

It is assumed that neither the construction method nor the building organisation have undergone any change, and consequently the calculations take no account of factors such as productivity improvements, more efficient utilisation of materials, etc. which may influence cost trends. Changes in the profit margins, which also affect an output price index, have not been taken into account either.

The coverage of this indicator is limited only by the Classification of types of Construction (CC).

The unit of observation is the "kind of activity unit"(KAU). In practice material costs may be observed for products, and the indices compiled for these products, then combined using a set of weightings corresponding to the importance of the products in new residential buildings.

The weighting for aggregating this index between Member States is generally turnover in building construction and is derived from information obtained from structural business statistics or other statistics.

The measurement of prices should, as far as possible, be based on actual prices (net prices), given that price information about a certain material sometimes varies, even when it is from the same supplier. This is explained by the fact that a price is the result of negotiation. Many factors affect the negotiation process, such as the market situation, the quantity involved and the size of previous orders.

Prices may be collected specifically for this index or the index may be compiled by combining data that have been collected for other primary purposes, for example as output prices of branches supplying construction or as labour input indices for construction.

No special surveys are undertaken in order to calculate the construction cost index. It is possible to use other indices that are already available from different sources. The following table gives examples of the different sources used in some European countries.

	Sources
Materials	Price lists, Producer Price Index, Statistical offices of trade chambers, Wholesale prices
Labour	Collective agreements, Labour cost survey
Equipment	Producer Price Index for machinery
Energy	Producer Price Index, Wholesale price index

Measuring changes in the prices or costs of construction work is very difficult. The output of the activity in any period includes a wide variety of structures and types of work. The pattern of work – buildings of all types, repair and maintenance work – varies from period to period and from year to year. Each building is, in some way, unique. The construction costs of seemingly identical buildings can vary quite considerably owing to variations in ground or site conditions and, hence, in setting-up and operating costs.

Graph 17: Construction cost indices and its components, for new residential buildings. *(2000=100), for euro area*

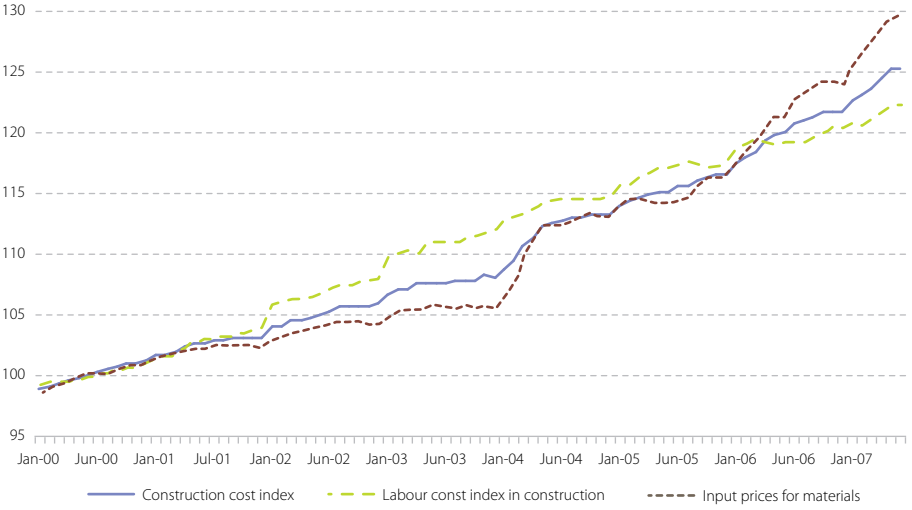


Table 9: Annual construction cost indices for new residential buildings *(2000=100)*

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
EU–27	90.2	92.5	96.1	100.0	104.0	108.7	114.0	120.8	125.3	130.5
Euro area	94.2	95.1	96.6	100.0	102.4	104.9	107.5	111.9	115.3	120.0
Czech Republic	:	:	:	:	:	:	108.2	114.7	119.1	121.6
Denmark	91.8	94.5	97.5	100.0	103.2	105.4	107.9	109.5	112.5	117.8
Germany	:	:	:	100.0	100.9	102.0	103.3	106.0	107.0	109.5
Estonia	88.5	95.6	97.8	100.0	105.7	109.9	113.7	119.7	127.1	140.4
Ireland	:	:	:	100.0	116.8	121.6	133.8	150.9	164.0	179.7
Greece	87.9	93.8	97.7	100.0	102.7	105.1	107.9	111.1	114.7	119.3
Spain	92.7	94.3	95.8	100.0	102.7	104.4	106.7	111.7	119.1	126.8
France	95.5	96.6	98.0	101.5	104.3	107.7	111.2	117.7	120.5	126.9
Italy	96.8	95.5	97.1	100.0	102.2	106.3	109.5	114.0	118.6	122.3
Cyprus	:	94.8	94.8	100.0	103.7	108.0	114.1	123.0	128.7	134.7
Latvia	:	:	:	:	:	:	:	:	:	:
Lithuania	93.6	97.8	99.3	100.0	98.9	99.1	100.5	107.6	116.5	128.9
Luxembourg	93.4	95.2	96.9	100.0	104.2	107.0	109.2	112.2	115.6	118.9
Hungary	:	:	87.4	97.4	108.0	115.1	119.5	126.2	130.6	138.2

Netherlands	92.6	94.9	96.4	100.0	104.5	107.9	109.5	111.8	113.7	117.1
Austria	93.7	95.8	97.8	100.0	102.1	103.7	106.4	111.9	114.3	119.5
Poland	:	:	:	100.0	103.1	103.0	102.1	104.8	107.7	109.2
Portugal	:	:	95.7	100.0	101.1	104.4	106.2	110.2	113.0	117.0
Romania	:	:	:	100.0	140.6	175.2	214.3	255.3	288.7	318.7
Slovenia	:	88.9	94.3	100.0	106.5	112.1	118.7	131.0	138.9	143.6
Slovakia	75.7	82.5	91.6	99.9	106.2	111.5	116.2	124.2	130.2	135.4
Finland	93.6	95.8	97.1	100.0	102.5	103.3	105.2	107.8	111.7	115.9
Sweden	91.3	93.9	96.3	100.0	104.4	108.1	111.8	116.1	120.7	126.8
United Kingdom	79.9	85.7	94.7	100.0	108.9	122.6	139.0	155.8	163.7	170.9
Turkey	:	:	:	100.0	156.5	212.7	258.1	295.8	100.0	116.0
Norway	91.1	93.8	96.3	100.0	104.8	108.3	111.6	114.9	118.8	123.3

Source: Eurostat (EBT_COPI_A)

Access to the data

Data collected by Member States are transmitted to Eurostat as an index, with the year 2000 as base year. The Short Term Statistics Regulation (STS-R) calls for quarterly indices on construction costs for new residential buildings, excluding residences for communities.

Data are revised when additional information from national statistical authorities becomes available. Major changes in methodology are announced in the "Quarterly panorama of European business statistics" (see Eurostat home page => Industry, Trade and Services => Short Term Business Statistics => Publications)

Data are published for the euro area, the European Union and for each country separately, if data are available. The data are accessible via the Eurostat Website => Theme Industry, Trade and Services => Data => Industry, Trade and Services – horizontal view => Short Term Business Statistics Monthly and Quarterly.

11

Services Producer Price Indices

Services account for the lion's share of GDP in most of the EU countries. The Short Term Statistics Regulation (Council Regulation (EC) No 1165/98 of 19 May 1998) already introduced a requirement to provide statistics on the turnover of services on a quarterly basis. In the early 2000s, both the European Commission and the European Central Bank (ECB) highlighted the need for better data and to include output prices for services, which were missing from the 1998 Regulation.

The development of Services Producer Prices Index (SPPI) was thereafter integrated into the framework of European short-term business statistics (STS) through an amendment to the relevant Regulation in 2005. Acknowledging that these series do not exist and that it takes a number of years to put new data collection procedures in place, agreement was reached on a transition period up to the second half of 2008. Eurostat and the National Statistical Institutes are working together to identify best practices to ensure quality and cost-effectiveness of the full data when they become available at the end of 2008.

The current availability of SPPI data for economic analysis is limited to only a few Member States and a few services activities.

Definition

The SPPI is an output price index for the production of services by resident producers. The index relates to the production of those services that may constitute the principal or secondary activity of an industry.

SPPI indicates the trend in prices for services delivered to enterprises or persons representing enterprises. Services rendered to households are covered in the HICP. The index covers services provided on both the domestic and non–domestic markets. It does not include imported services, i.e. services provided by units that have residence in some other country.

The appropriate measure of price is the transaction price, reflecting the revenue received by the producer for products actually sold. This takes into account any discounts, rebates, surcharges, etc. that may apply to the customers. Taxes on products are excluded from prices, because the price reflects revenue received by the producer, but subsidies on products received by the producer, if there are any, are added.

The price should be recorded at the date of delivery of the service. If the service delivery spans several time periods, appropriate adjustments have to be made.

The SPPIs are meant to trace price movements that reflect the supply and demand conditions in the service markets, with a view to facilitating analysis of macroeconomic conditions and the monitoring of inflationary pressures. They also have an important role to play as a deflator in the national accounts, to convert the value of service output into volume measures. Volume measures of service output at various intervals are essential for economic analysis. The SPPIs are also useful for the business community to evaluate particular markets.

Computing and aggregations

The classification used for calculating the SPPIs is the Statistical Classification of Economic Activities in the European Communities (NACE, see annex). The STS-Regulations require coverage of section I (transport and communication) and K (business services).

The identification of service products is a fundamental part of compiling SPPI. It involves identifying those service characteristics that are price-relevant, and distinguishing between apparently similar services. This task tends to be more complex for services than for goods (for example, the major difference between goods and services is that the delivery of services often coincides with their production). Services are typically produced and delivered in direct contact with the customer, and as a consequence there is a more frequent occurrence of unique service products (e.g. in legal, accounting and consultancy-type services) than in the equivalent case of the production of goods.

Pricing methods for SPPI

Pricing methods are processes applied to price data – possibly based on various mechanisms – to make them suitable for use in an index. Price observations that refer directly to specified service outputs are an important ingredient in developing conceptually satisfactory SPPIs.

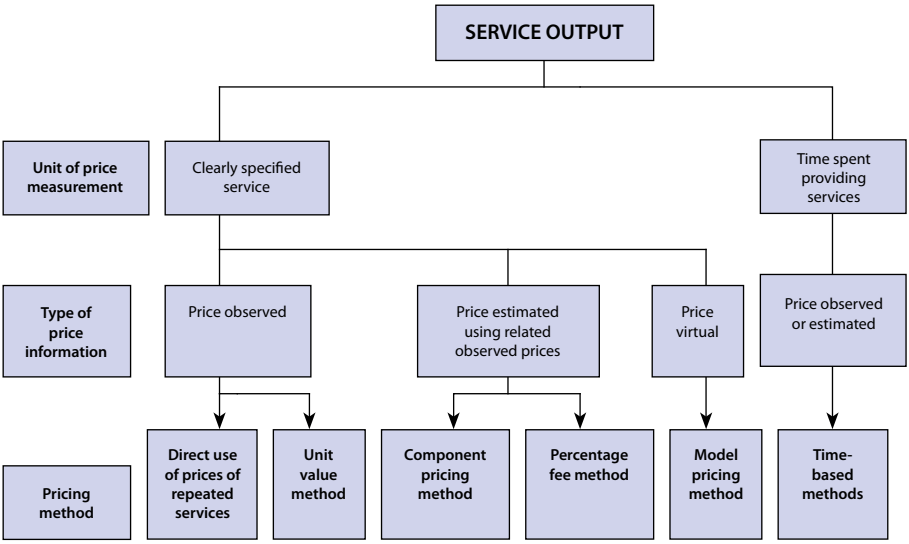
The main pricing methods for SPPI are:

- ***Direct use of prices of repeated services*** – this represents the ideal of using actual transaction prices of the same service products in successive survey periods. A special case, is that of contract pricing, where prices are used in long-term contracts for the repeat delivery of the same or a very similar service over a number of survey periods;
- ***Unit value method*** – the prices used in compiling an index are estimated by means of aggregate figures for value and quantity. The resulting unit values are hardly ever based on homogeneous groupings of service products, and the method can therefore be regarded as an imperfect option;
- ***Component pricing method*** – this involves the use of a number of independently observed prices of output components. The price to be entered into a price index is the sum (weighted or unweighted) of the prices of the components;
- ***Percentage fee method*** –pricing based on percentage fees is only applicable if the pricing mechanism bases the price on a percentage of asset value (or price of some other goods or services) with which the service is connected. This method monitors the development of both the percentage rate and the price of the associated item;
- ***Model pricing*** – the survey calls for an expert estimate of price. The data for index calculation are compiled solely for the survey. Any existing enterprise data are used in the estimation, but the resulting price itself is notional. In principle, a basic requirement of the method is that service products should be specified and, thus, changes in productivity are expected

to be taken into account. This means that efforts are made to estimate changes in terms of the working time actually required rather than immediately assuming it to be the same as in the previous period;

- ***Pricing based on working time*** – often applied for business services where hourly rates are typically used as a pricing mechanism. The resulting measure in this method is the development in the price of the working time spent in providing the service rather than the development of the price of the service itself. Pricing may come in different forms. For instance, the pricing mechanism can be based on charge-out rates according to the type of staff that is used, or prices may be built up from the costs of service provision.

Figure 4: Main pricing methods



Relationship of the SPPI to other major price indices

The scope of SPPI is supposed to cover all types of users, even though empirically the focus is on those SPPI where deliveries to businesses play an important role. Nonetheless, there is an overlap between SPPI and CPIs when it comes to the pricing of services delivered to households. The STS-R specifies that the "output price variables cover services delivered to customers that are enterprises or persons representing enterprises". This means that the SPPI cover business-to-business (B to B) transactions, thus omitting services provided to customers (B to C). For several activities it was suggested that indices should be compiled that are "B to All": air passenger trans-

port, sea and coastal water transport, post and telecommunications. For the purpose of national accounts, it seems more appropriate to use the scope of "B to All" and to divide it up into categories for businesses, public sector and households. The CPI focuses on the consumption of private households, whereas the SPPI measures the output prices for services of domestic producers.

The National Statistical Institutes are best placed to re-arrange the CPI data to measure the prices of services provided to consumers in those activities where sales to consumers are important.

Access to data

No data are available on the Eurostat website yet. Initial data are expected to be available in the second quarter of 2008.

Annex

A full listing of statistical classification is accessible on the Ramon server of the Eurostat website (home page – Methodologies – Eurostat Metadata Server (Ramon)).

1. NACE Rev. 1. 1

Statistical Classification of Economic Activities in the European Community, Rev. 1.1 (2002)

A	**Agriculture, hunting and forestry**
01	Agriculture, hunting and related service activities
02	Forestry, logging and related service activities
B	**Fishing**
05	Fishing, fish farming and related service activities
C	**Mining and quarrying**
10	Mining of coal and lignite; extraction of peat
11	Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction, excluding surveying
12	Mining of uranium and thorium ores
13	Mining of metal ores
14	Other mining and quarrying
D	**Manufacturing**
15	Manufacture of food products and beverages
16	Manufacture of tobacco products
17	Manufacture of textiles
18	Manufacture of wearing apparel; dressing and dyeing of fur
19	Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear
20	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
21	Manufacture of pulp, paper and paper products
22	Publishing, printing and reproduction of recorded media
23	Manufacture of coke, refined petroleum products and nuclear fuel
24	Manufacture of chemicals and chemical products
25	Manufacture of rubber and plastic products
26	Manufacture of other non-metallic mineral products
27	Manufacture of basic metals

28	Manufacture of fabricated metal products, except machinery and equipment
29	Manufacture of machinery and equipment n.e.c.
30	Manufacture of office machinery and computers
31	Manufacture of electrical machinery and apparatus n.e.c.
32	Manufacture of radio, television and communication equipment and apparatus
33	Manufacture of medical, precision and optical instruments, watches and clocks
34	Manufacture of motor vehicles, trailers and semi-trailers
35	Manufacture of other transport equipment
36	Manufacture of furniture; manufacturing n.e.c.
37	Recycling
E	**Electricity, gas and water supply**
40	Electricity, gas, steam and hot water supply
41	Collection, purification and distribution of water
F	**Construction**
45	Construction
G	**Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods**
50	Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel
51	Wholesale trade and commission trade, except of motor vehicles and motorcycles
52	Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods
H	**Hotels and restaurants**
55	Hotels and restaurants
I	**Transport, storage and communication**
60	Land transport; transport via pipelines
61	Water transport
62	Air transport
63	Supporting and auxiliary transport activities; activities of travel agencies
64	Post and telecommunications
J	**Financial intermediation**
65	Financial intermediation, except insurance and pension funding
66	Insurance and pension funding, except compulsory social security
67	Activities auxiliary to financial intermediation

K	**Real estate, renting and business activities**
70	Real estate activities
71	Renting of machinery and equipment without operator and of personal and household goods
72	Computer and related activities
73	Research and development
74	Other business activities
L	**Public administration and defence; compulsory social security**
75	Public administration and defence; compulsory social security
M	**Education**
80	Education
N	**Health and social work**
85	Health and social work
O	**Other community, social and personal service activities**
90	Sewage and refuse disposal, sanitation and similar activities
91	Activities of membership organizations n.e.c.
92	Recreational, cultural and sporting activities
93	Other service activities
P	**Activities of households**
95	Activities of households as employers of domestic staff
96	Undifferentiated goods producing activities of private households for own use
97	Undifferentiated services producing activities of private households for own use
Q	**Extra-territorial organizations and bodies**
99	Extra-territorial organizations and bodies

Note that a revised classification (NACE Rev. 2) was adopted at the end of 2006, and its implementation will begin in 2007.

2. COICOP/HICP Classification

Classification of Individual Consumption by Purpose Adapted to the Needs of Harmonized Indices of Consumer Prices (2000) (COICOP/HICP 2000)

01	**Food and non-alcoholic beverages**
01.1	Food
01.2	Non-alcoholic beverages
02	**Alcoholic beverages, tobacco**
02.1	Alcoholic beverages
02.2	Tobacco
03	**Clothing and footwear**
03.1	Clothing
03.2	Footwear
04	**Housing, water, electricity, gas and other fuels**
04.1	Actual rentals for housing
04.3	Maintenance and repair of the dwelling
04.4	Water supply and miscellaneous services relating to the dwelling
04.5	Electricity, gas and other fuels
05	**Furnishings, household equipment and routine maintenance of the house**
05.1	Furniture and furnishings, carpets and other floor coverings
05.2	Household textiles
05.3	Household appliances
05.4	Glassware, tableware and household utensils
05.5	Tools and equipment for house and garden
05.6	Goods and services for routine household maintenance
06	**Health**
06.1	Medical products, appliances and equipment
06.2	Out-patient services
06.3	Hospital services
07	**Transport**
07.1	Purchase of vehicles
07.2	Operation of personal transport equipment
07.3	Transport services

08	**Communication**
08.1	Postal services
08.2	Telephone and telefax equipment and telephone and telefax services (equipment)
08.3	Telephone and telefax equipment and telephone and telefax services (services)
09	**Recreation and culture**
09.1	Audio-visual, photographic and information processing equipment
09.2	Other major durables for recreation and culture
09.3	Other recreational items and equipment, gardens and pets
09.4	Recreational and cultural services
09.5	Newspapers, books and stationery
09.6	Package holidays
10	**Education**
11	**Restaurants and hotels**
11.1	Catering services
11.2	Accommodation services
12	**Miscellaneous goods and services**
12.1	Personal care
12.3	Personal effects n.e.c.
12.4	Social protection
12.5	Insurance
12.6	Financial services n.e.c.
12.7	Other services n.e.c.

3. SITC, Rev. 4

Standard International Trade Classification, Revision 4

Section 0 Food and live animals

00	Live animals other than animals of division
01	Meat and meat preparations
02	Dairy products and birds' eggs
03	Fish (not marine mammals), crustaceans, molluscs and aquatic invertebrates and preparations thereof
04	Cereals and cereal preparations
05	Vegetables and fruit
06	Sugars, sugar preparations and honey
07	Coffee, tea, cocoa, spices, and manufactures thereof
08	Feeding stuff for animals (not including unmilled cereals)
09	Miscellaneous edible products and preparations

Section 1 Beverages and tobacco

11	Beverages
12	Tobacco and tobacco manufactures

Section 2 Crude materials, inedible, except fuels

21	Hides, skins and furskins, raw
22	Oil-seeds and oleaginous fruits
23	Crude rubber (including synthetic and reclaimed)
24	Cork and wood
25	Pulp and waste paper
26	Textile fibres (other than wool tops and other combed wool) and their wastes not manufactured into yarn or fabric)
27	Crude fertilizers, other than those of division 56, and crude minerals excluding coal, petroleum and precious stones)
28	Metalliferous ores and metal scrap
29	Crude animal and vegetable materials, n.e.s.

Section 3 Mineral fuels, lubricants and related materials

32	Coal, coke and briquettes

33 Petroleum, petroleum products and related materials

34 Gas, natural and manufactured

35 Electric current

Section 4 Animal and vegetable oils, fats and waxes

41 Animal oils and fats

42 Fixed vegetable fats and oils, crude, refined or fractionated

43 Animal or vegetable fats and oils, processed; waxes of animal or vegetable origin; inedible mixtures or preparations of animal or vegetable fats or oils, **n.e.s.**

Section 5 Chemicals and related products, n.e.s.

51 Organic chemicals

52 Inorganic chemicals

53 Dyeing, tanning and colouring materials

54 Medicinal and pharmaceutical products

55 Essential oils and resinoids and perfume materials; toilet, polishing and cleaning preparations

56 Fertilizers (other than those of group 272)

57 Plastics in primary forms

58 Plastics in non-primary forms

59 Chemical materials and products, n.e.s.

Section 6 Manufactured goods classified chiefly by material

61 Leather, leather manufactures, n.e.s., and dressed furskins

62 Rubber manufactures, n.e.s.

63 Cork and wood manufactures (excluding furniture)

64 Paper, paperboard and articles of paper pulp, of paper or of paperboard

65 Textile yarn, fabrics, made-up articles, n.e.s., and related products

66 Non-metallic mineral manufactures, n.e.s.

67 Iron and steel

68 Non-ferrous metals

69 Manufactures of metals, n.e.s.

Section 7 Machinery and transport equipment

71 Power-generating machinery and equipment

72 Machinery specialized for particular industries

73	Metalworking machinery
74	General industrial machinery and equipment, n.e.s., and machine parts, n.e.s. 75 Office machines and automatic data-processing machines
76	Telecommunications and sound-recording and reproducing apparatus and equipment
77	Electrical machinery, apparatus and appliances, n.e.s., and electrical parts thereof (including non-electrical counterparts, n.e.s., of electrical household-type equipment)
78	Road vehicles (including air-cushion vehicles)
79	Other transport equipment

Section 8 Miscellaneous manufactured articles

81	Prefabricated buildings; sanitary plumbing, heating and lighting fixtures and fittings, n.e.s.
82	Furniture and parts thereof; bedding, mattresses, mattress supports, cushions and similar stuffed furnishings
83	Travel goods, handbags and similar containers
84	Articles of apparel and clothing accessories
85	Footwear
87	Professional, scientific and controlling instruments and apparatus, n.e.s.
88	Photographic apparatus, equipment and supplies and optical goods, n.e.s.; watches and clocks
89	Miscellaneous manufactured articles, n.e.s.

Section 9 Commodities and transactions not classified elsewhere in the SITC

91	Postal packages not classified according to kind
93	Special transactions and commodities not classified according to kind
96	Coin (other than gold coin), not being legal tender
97	Gold, non-monetary (excluding gold, ores and concentrates)

Abbreviations

AAP	Absolute agricultural prices
APS	Agricultural price statistics
CAP	Common Agricultural Policy
CC	Classification of types of Construction
CCI	Construction Cost Index
CPA	Statistical Classification of Products by Activity in the European Economic Community
COICOP/HICP	Classification of Individual Consumption by Purpose adapted to the needs of the HICP
CPI	Consumer price index
DG-TREN	Directorate-General for Energy and Transport
EEA	European Economic Area
EFTA	European Free Trade Area
ECU	European Currency Unit
EICP	European Index of Consumer Prices
FOB	free on board
GBP	Pound sterling
GDP	Gross Domestic Product
GJ	Gigajoule
HICP	Harmonised index of consumer prices
KAU	kind-of activity-unit
kWh	kilowatt-hour
LCI	Labour cost index
MWh	Megawatt hours
OECD	Organisation for Economic Cooperation and Development
OOH	Owner-Occupied Housing
MPI	Import Price Indices
MUICP	Monetary Union Index of Consumer Prices
NACE Rev.1.1.	Statistical Classification of Economic Activities in the European Community, see Annex 1
PLI	Price Level Index
PPI	Producer price index
PPP	Purchasing Power Parity

PPS	Purchasing Power Standards
ROZ	Research-Oktanzahl
SITC	Standard International Trade Classification
SPPI	Services producer price indices
STS	Short-Term Statistics
STS-R	Short-Term Statistics Regulations (COUNCIL REGULATION (EC) No 1165/98) of 19 May 1998 concerning short-term statistics and REGULATION (EC) No 1158/2005 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 6 July 2005 amending Council Regulation (EC) No 1165/98 concerning short-term statistics
UVI	Unit value indices
VAT	Value Added Tax
XPI	Export Price Indices

EU-27	European Union of 27 Member States
EU-25	European Union of 25 Member States
Euro area	the countries participating in the euro area in the reference year
BE	Belgium
BG	Bulgaria
CZ	Czech Republic
DK	Denmark
DE	Germany
EE	Estonia
IE	Ireland
EL	Greece
ES	Spain
FR	France
IT	Italy
CY	Cyprus
LV	Latvia
LT	Lithuania
LU	Luxembourg

HU	Hungary
MT	Malta
NL	Netherlands
AT	Austria
PL	Poland
PT	Portugal
RO	Romania
SI	Slovenia
SK	Slovakia
FI	Finland
SE	Sweden
UK	United Kingdom

HR	Croatia
MK	the former Yugoslav Republic of Macedonia
TR	Turkey
IS	Iceland
NO	Norway
CH	Switzerland

Further information

Free access to most Eurostat data is available through the Eurostat website, which can be found at: http://ec.europa.eu/eurostat. The website presents a vast array of information in the form of tables, databases, methodology and publications: these are all structured primarily by subjects/themes.

Data are generally provided for the European Union total (EU-27), the euro area and the Member States, and (when available) for the candidate countries and the EFTA countries.

All statistical classifications as well as many definitions can be found from the home page under Methodologies – Eurostat Metadata Server (Ramon).

For further reading, the following websites are recommended:

OECD – http://www.oecd.org

U. S. Department of Labour – Bureau of Labour Statistics – http://stats.bls.gov

Austrian Bureau of Statistics – http://www.abs.gov.au

H M Treasury (UK) – http://www.hm-treasury.gov.uk

Statistics Finland – http://www.stat.fi

National Statistical Institute of Bulgaria – http://www.nsi.bg

Office for National Statistics (UK) – http://www.statistics.gov.uk

The Eurostat data code

A code (such as "tec00027") has been inserted as part of the source whenever Eurostat data is presented in this publication. This code allows the reader to easily access the complete and most recent data on the Eurostat website. Please consult 'The Eurostat data code' on the Eurostat home page for more details.

Symbols used for data

An italic font is used in tables to show provisional data, estimates and forecasts (in other words, data that are likely to change in the future). The colon (:) is used in tables to represent data that are not available, either because the value was not provided by the national statistical authority or because the value is confidential. In figures (charts/graphs), missing information is footnoted as not available. A dash (-) is used to indicate values that are not relevant or not applicable.

European Commission

European Price Statistics – An overview

Luxembourg: Office for Official Publications of the European Communities

2008 — 114 pp. — 14.8 x 21 cm

ISBN 978-92-79-07356-4

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European Price Statistics

An overview

The publication explains the methodologies and use of European price indices and helps economists and citizens alike to understand the main concepts of price statistics. The book shows and illustrates the price indices that exist in the Eurostat data bases and explains their relevance, their interrelationships and differences. Although the publication is illustrated by graphs and tables with statistical data, communicating the latest figures is not the primary objective.

http://ec.europa.eu/eurostat

KS-70-07-038-EN-N

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