Comparative price levels for investment

Statistics Explained

Data from 17 December 2025
Planned article update: 17 June 2026

Highlights

In 2024, price levels for investment in the EU were highest for Germany (22% above the EU average) and lowest for Croatia (31% below the EU average).In 2024, in the EU, Malta had the highest price levels for machinery and equipment and for software while Germany - for construction investment in residential and non-residential buildings.

This article focuses on price levels of investment in the European Union (EU) countries, covering also 3 EFTA countries (Iceland, Norway and Switzerland), as well as 6 EU candidate countries (Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, Serbia and Türkiye).

Overview

In 2024, the highest price levels for investment among the EU countries were observed in Germany at 22% above the EU average, while in the least expensive EU country for investment, Croatia, the price level was 31% below the EU average. These are the main conclusions drawn from the results of 2 price data collections carried out in 2024 within the Eurostat - OECD Purchasing Power Parities (PPP) Programme. The 2 surveys cover construction (residential buildings , non-residential buildings and civil engineering works) and machinery, equipment and other products. The survey results are expressed in price level indices , which provide a comparison of countries' price levels with respect to the EU average.

Figure 1 shows the 2024 price level indices for total investment. Switzerland and Germany recorded the highest price levels for investments, with price level indices of 130 and 122, respectively. At the other end of the spectrum, the least expensive
countries for investment were Türkiye and Bosnia and Herzegovina, with price level indices of 59 and 66, respectively.

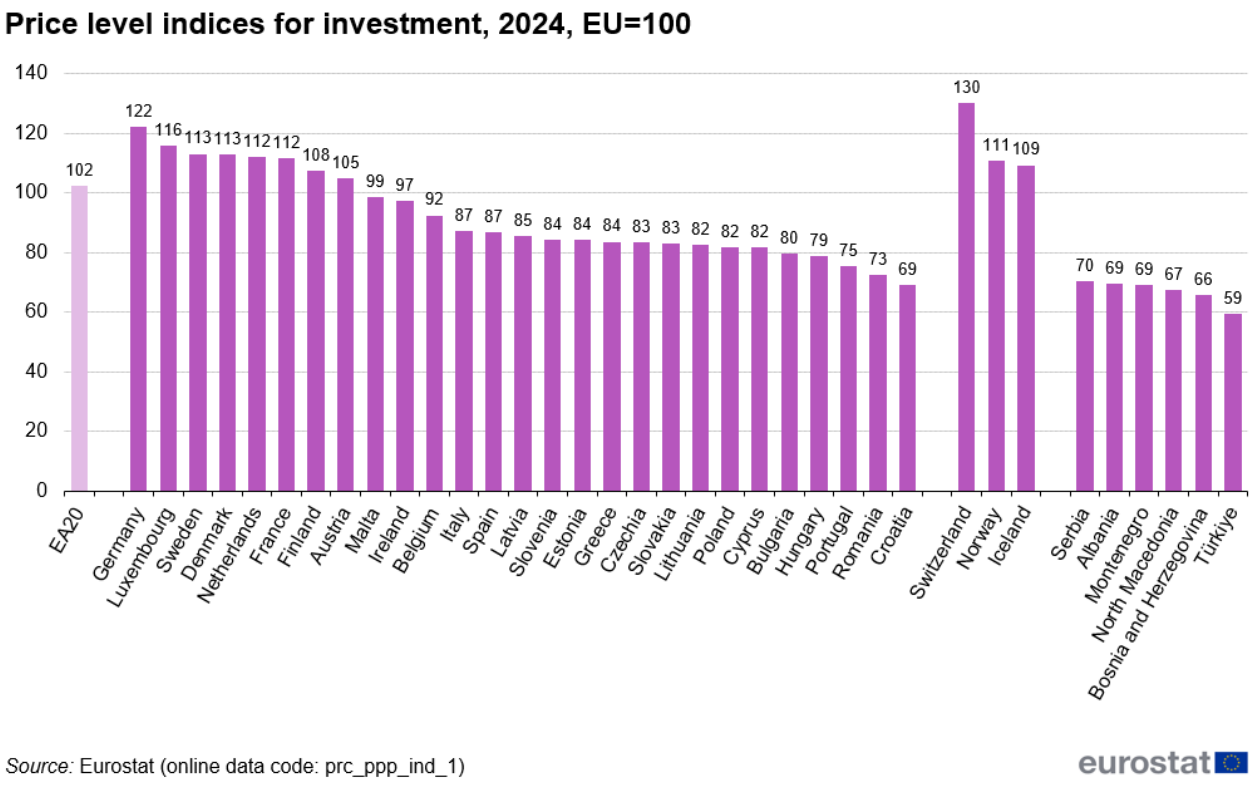

Figure 1: Price level indices for investment, 2024, EU=100 Source: Eurostat (prc_ppp_ind_1)

Machinery, equipment and other products

Figure 2 shows the price level indices for machinery and equipment, including metal products and equipment, electrical and optical equipment and transport equipment (see classification of investment products used). Among all 36 countries, the most expensive country for machinery, equipment and other products was Switzerland, with a price level index of 124, while Türkiye was the least expensive one, with a price level index of 67. The main characteristic shown by this chart is that the price levels for this type of product are relatively homogeneous across countries.

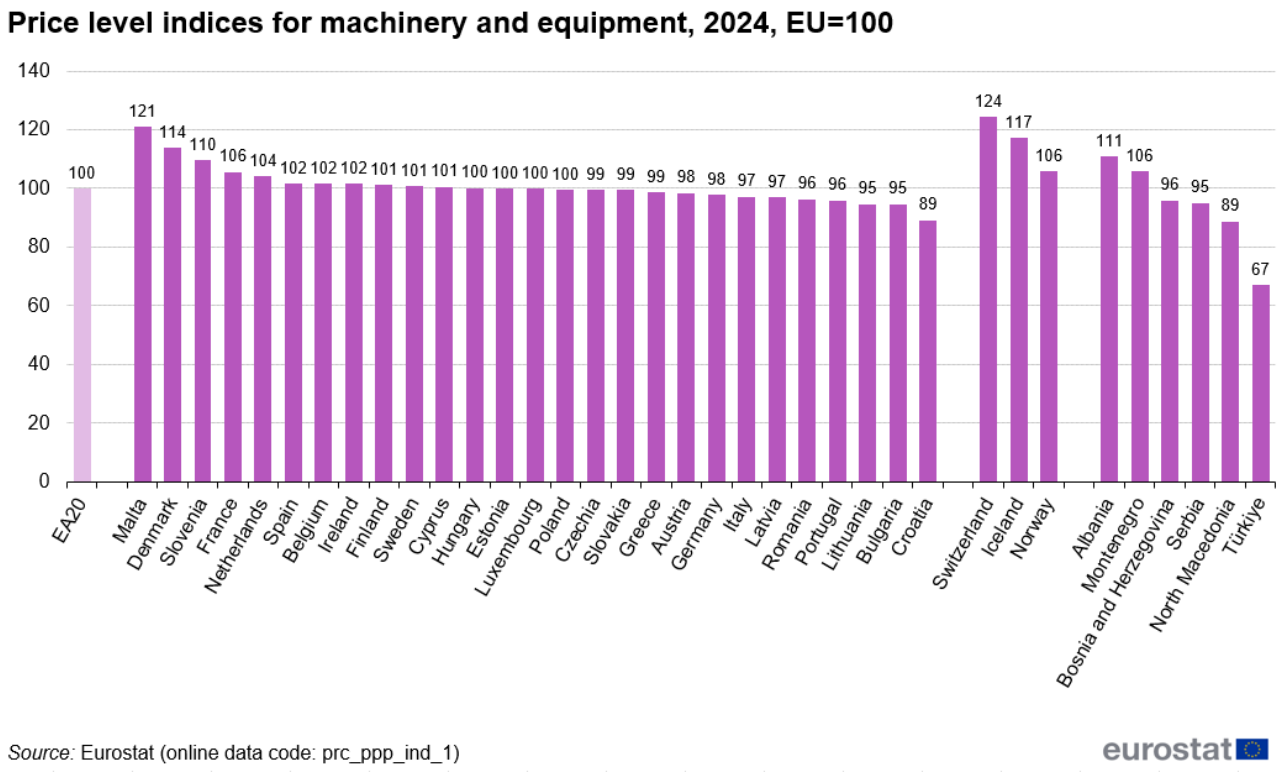

Figure 2: Price level indices for machinery and equipment, 2024, EU=100 Source: Eurostat (prc_ppp_ind_1)

Table 1 shows the countries' price level indices for aggregate machinery and equipment as well as for its 3 main sub-categories: metal products and equipment, electrical and optical equipment and transport equipment. In addition, the price level indices for software are shown. Countries are sorted according to their overall price level for investment as shown in the first column. The shaded fields indicate the highest and lowest price level indices per category among all 36 participating countries. The highest and lowest price level indices among the 27 EU countries are marked in bold.

Price level indices for machinery, equipment and software, 2024, (EU=100)

	Investment	Machinery and equipment	Main subcategories (machinery and equipment)			Software
			Metal products and equipment	Electrical and optical equipment	Transport equipment	
Germany	**122.1**	97.7	99.0	95.3	97.9	94.8
Luxembourg	115.8	99.8	107.9	100.4	94.0	101.0
Sweden	113.0	100.8	100.4	103.6	99.6	106.4
Denmark	112.8	113.7	107.3	110.2	**123.1**	94.9
Netherlands	112.1	104.2	100.1	97.9	113.4	110.6
France	111.7	105.6	102.0	100.3	111.0	98.7
Finland	107.5	101.1	103.1	103.6	96.7	107.2
Austria	104.9	98.4	99.3	100.1	96.1	102.2
EA20	102.4	99.9	100.5	99.3	99.8	99.6
Malta	98.6	**121.1**	**126.8**	**125.8**	110.2	**117.5**
Ireland	97.2	101.5	101.1	102.5	99.8	100.9
Belgium	92.4	101.6	97.3	106.5	103.3	103.2
Italy	87.2	97.2	100.2	101.2	90.5	96.9
Spain	86.8	101.7	105.0	101.5	98.2	97.6
Latvia	85.4	96.9	97.6	100.3	93.8	98.6
Slovenia	84.2	109.6	113.4	115.4	101.1	112.9
Estonia	84.1	100.0	98.5	107.5	95.2	102.9
Greece	83.5	98.8	99.7	101.7	95.3	113.1
Czechia	83.4	99.4	98.0	95.6	103.8	100.7
Slovakia	82.8	99.4	104.2	96.7	93.0	99.2
Lithuania	82.4	94.7	97.4	96.7	90.4	116.3
Poland	81.6	99.5	97.1	104.4	98.6	108.5
Cyprus	81.6	100.6	107.3	109.0	90.0	104.7
Bulgaria	79.7	94.6	95.2	102.0	89.0	96.7
Hungary	78.7	100.2	95.2	100.8	108.3	**88.3**
Portugal	75.4	95.9	102.0	97.3	88.1	100.3
Romania	72.5	96.4	94.4	100.2	95.0	100.2
Croatia	**69.5**	**89.2**	**94.3**	**94.5**	**80.2**	101.5
Switzerland	130.1	124.4	130.3	116.9	126.8	121.2
Norway	110.8	105.7	104.4	104.6	107.5	109.3
Iceland	109.3	117.3	117.6	122.4	113.2	106.9
Serbia	70.2	95.1	95.8	100.3	90.1	108.9
Albania	69.4	110.8	108.5	114.9	110.3	102.6
Montenegro	69.1	105.7	106.9	112.7	98.2	104.3
North Macedonia	67.4	88.8	88.1	97.8	82.1	95.7
Bosnia and Herzegovina	65.8	95.9	95.8	104.5	89.0	102.0
Türkiye	59.3	67.2	65.9	60.8	72.0	47.9
Coefficients of variation						
EA-20	14.5	5.6	6.7	6.8	7.4	7.1
EU	16.0	6.0	6.6	6.4	9.0	6.6
All 36	20.0	9.5	10.2	10.0	11.4	11.2

Notes: countries are sorted according to their overall price level for investment shown in the first column.
The shaded fields indicate the highest and lowest PLIs per category among all 36 participating countries.
The highest and lowest PLIs among the 27 EU Member States are marked in bold.
Source: Eurostat (online data code: prc_ppp_ind_1)

eurostat

Table 1: Price level indices for machinery, equipment and software, 2024, (EU=100) Source: Eurostat (prc_ppp_ind_1)

In 2024, Malta was the most expensive country for electrical and optical equipment while Switzerland - for the rest of the categories. By contrast, Türkiye was the least expensive country in all categories.

Looking at the EU countries, in 2024, Malta was the most expensive country for total machinery and equipment, as well as for the sub-category metal products and equipment, electrical and optical equipment and software. Denmark had the highest price levels for transport equipment.

At the bottom of the table, coefficients of variation are provided for the euro area (EA-20), the European Union (EU) and the group of all countries participating in the program (all 36). The coefficient of variation is defined as the standard deviation of the price level indices of the respective group of countries as percentage of their average price level index. The higher the coefficient of variation, the higher is the price dispersion in the respective category.

The coefficients of variation at the bottom of Table 1 confirm the relatively low price dispersion (compared to the categories within construction) across countries for these investment products. The highest homogeneity is visible within the euro area.

Among all 36 countries, transport equipment showed the highest price variation in 2024.

Construction

Figure 3 presents the price level indices for construction. The most expensive countries for construction investment were Switzerland and Germany, with price level indices of 146 and 145, respectively, followed by Luxembourg and Sweden. On
the other hand, Bosnia and Herzegovina was the least expensive country with a price level of 48% of the EU average.

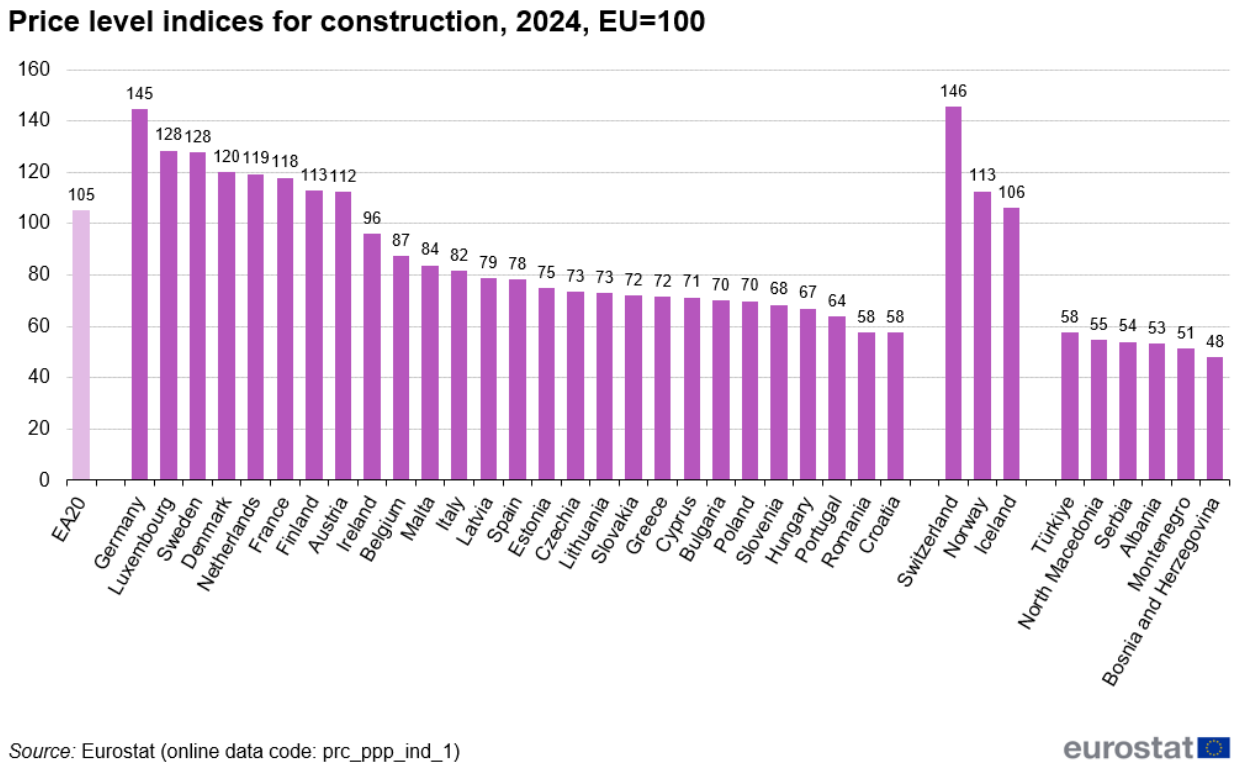

Figure 3: Price level indices for construction, 2024, EU=100 Source: Eurostat (prc_ppp_ind_1)

Table 2 shows the price level indices for the main categories of construction expenditure (residential buildings, non-residential buildings and civil engineering works). Countries are sorted according to their overall price level for investment shown in the first column. As in Table 1, the shaded fields indicate the highest and lowest price level indices per category among all 36 participating countries. The highest and lowest price level indices among the 27 EU countries are marked in bold.

Price level indices for construction and its components, 2024, (EU=100)

	Investment	Construction	Main sub-categories (construction)		
			Residential buildings	Non-residential buildings	Civil engineering works
Germany	**122.1**	**144.5**	**147.4**	**147.9**	127.9
Luxembourg	115.8	128.4	131.2	127.5	130.6
Sweden	113.0	127.8	128.3	140.0	111.6
Denmark	112.8	120.0	128.0	115.8	115.6
Netherlands	112.1	119.4	125.2	106.2	131.2
France	111.7	117.9	106.0	132.9	122.3
Finland	107.5	112.9	102.9	112.2	**141.3**
Austria	104.9	112.3	115.4	109.2	108.9
EA20	102.4	105.0	104.0	106.8	103.0
Malta	98.6	83.8	72.6	87.5	108.8
Ireland	97.2	96.1	100.3	90.8	95.0
Belgium	92.4	87.4	97.4	79.5	79.5
Italy	87.2	81.6	77.6	85.4	85.4
Spain	86.8	78.1	81.9	81.7	69.1
Latvia	85.4	78.6	72.4	92.3	**64.4**
Slovenia	84.2	68.4	48.7	74.0	101.2
Estonia	84.1	74.8	67.1	72.7	106.7
Greece	83.5	71.6	67.2	74.3	78.0
Czechia	83.4	73.4	69.2	70.2	89.6
Slovakia	82.8	72.1	63.4	75.6	86.7
Lithuania	82.4	72.8	60.5	70.7	100.0
Poland	81.6	69.9	58.4	75.6	83.0
Cyprus	81.6	71.2	63.1	74.2	91.7
Bulgaria	79.7	70.0	69.6	69.5	73.2
Hungary	78.7	67.0	61.5	69.0	76.3
Portugal	75.4	63.7	62.6	60.8	73.5
Romania	72.5	57.7	46.4	60.8	78.7
Croatia	**69.5**	**57.5**	**42.3**	**58.5**	91.7
Switzerland	130.1	145.6	157.0	152.6	116.3
Norway	110.8	112.6	120.8	120.6	104.2
Iceland	109.3	106.0	115.5	101.7	105.1
Serbia	70.2	53.9	41.6	52.3	77.2
Albania	69.4	53.4	47.9	58.6	60.0
Montenegro	69.1	51.4	40.1	55.5	66.1
North Macedonia	67.4	54.6	39.1	57.3	88.2
Bosnia and Herzegovina	65.8	48.1	36.9	55.3	58.0
Türkiye	59.3	57.6	44.1	69.5	77.7
Coefficients of variation					
EA-20	14.5	25.7	31.4	25.5	22.6
EU	16.0	27.8	34.7	28.0	21.5
All 36	20.0	32.5	41.8	31.9	22.9

Notes: countries are sorted according to their overall price level for investment shown in the first column.
The shaded fields indicate the highest and lowest PLIs per category among all 36 participating countries.
The highest and lowest PLIs among the 27 EU Member States are marked in bold.
Source: Eurostat (online data code: prc_ppp_ind_1)

eurostat

Table 2: Price level indices for construction and its components, 2024, (EU=100) Source: Eurostat (prc_ppp_ind_1)

In the EU, in 2024, Germany was the most expensive for investment in both residential buildings and for non-residential buildings, while Finland was the most expensive for civil engineering works. At the other end of the spectrum, the least expensive EU country for construction investment was Croatia, which was also the least expensive country for the sub-categories residential buildings and non-residential buildings. For the sub-category civil engineering works, the lowest price level indices were shown by Latvia.

Among all 36 countries, Switzerland had the highest price levels for residential buildings and for non-residential buildings. Bosnia and Herzegovina was the least expensive country for residential buildings and for civil engineering works.

Price dispersion was the highest within the 36-country group, and less pronounced in the euro area (EA-20) than in the EU as a whole. Price dispersion for all categories of construction was higher than that for total investment, reflecting the higher share of labour input into construction and the high variation in wages across countries. Price dispersion was the highest for residential buildings, followed by non-residential buildings.

Data sources

The data in this article are produced by the Eurostat-OECD Purchasing Power Parities (PPP) Programme. The full methodology used in the programme is described in the Eurostat-OECD Methodological manual on purchasing power parities available free of charge from the Eurostat website. For some basic headings, particularly those covered by the Hospital survey, price data were partially or completely missing for 2022, 2023, and 2024. For 2024, data were missing for Belgium, Germany, France, Spain, Slovakia, and Switzerland. For Estonia, data were missing for both 2023 and 2024. Among the candidate countries, data were completely or partially missing for Albania, Bosnia and Herzegovina, Montenegro, and Serbia. Eurostat estimated their PPP results for these basic headings for which no prices were reported by the countries. The implementation of COICOP 2018 applies only to the years 2022, 2023, and 2024. Data for previous years (1995–2021) have been estimated only for GDP and its main components and are published in the new Eurobase dataset. Data for the former analytical categories, based on the previous COICOP classification, remain available in the earlier dataset.

The PPP concept

In their simplest form PPPs are nothing more than price relatives that show the ratio of the prices in national currencies for the same good or service in different countries. For example, if the price of a hamburger in Sweden is 28.60 Swedish krona and in Italy it is 2.76 euro, the PPP for hamburgers between Sweden and Italy is 28.60 krona to 2.76 euro or 10.36 krona to the euro. In other words, for every euro spent on hamburgers in Italy, 10.36 krona would have to be spent in Sweden in order to obtain the same quantity and quality – or volume – of hamburgers.

The provisional PPP estimates for year t are released at t+6 months. The data release is accompanied by two news items presenting the provisional estimates of Actual Individual Consumption (AIC) per capita and volume indices of AIC and GDP, and the price levels for a selection of analytical categories comprising household expenditure.

By the end of September (t+9 months) each year, countries report for the first time the expenditures at basic heading level for the year t. The PPPs calculated with these expenditures are released in t+12 months and referred to as first estimates. At the same time as the first estimates of PPPs are calculated for t, the second or intermediate estimates of PPPs for the year t-1 and the third or final estimates of PPPs for the year t-2 are calculated.

In 2022 Eurostat introduced the PPP preliminary estimates, which will be regularly released in March year t+1. Given the availability of the data sources and the possibility of applying a similar method to that used for the first estimates at t+6, Eurostat calculates GDP PPPs for the EU 27 Member States at the most detailed level possible and using the latest available prices and national accounts data.

The main differences in the compilation process between the PPP preliminary estimates and the provisional PPP estimates released at t+6 months are:

- in terms of geographical coverage – the provisional estimates will include all 36 countries, not just the EU 27 Member States
- in terms of level of detail – the provisional estimates will be available for all analytical categories, not just for GDP
- in terms of information available - the provisional estimates include more complete and more final price data from the countries than the PPP preliminary estimates. Also the provisional estimates are based on the national accounts data available at the end of May of year t.

Published PPPs usually refer to product groups or broad aggregates like gross domestic product (GDP) rather than to individual products. However, these aggregate PPPs are based on data for individual goods and services.

Price level indices

Price levels as presented in this publication are the ratios of PPPs to exchange rates. They provide a measure of the differences in price levels between countries by indicating for a given product group the number of units of common currency needed to buy the same volume of the product group or aggregate in each country.

Price level indices provide a comparison of the countries' price levels relative to the European Union average: if the

price level index is higher than 100, the country concerned is relatively expensive compared to the EU average, while if the price level index is lower than 100, then the country is relatively inexpensive compared to the EU average. The EU average is calculated as the weighted average of the national price level indices, weighted with expenditures from national accounts, corrected for price level differences.

Price level indices are not intended to rank countries strictly. In fact, they only provide an indication of the order of magnitude of the price level in one country in relation to others, particularly when countries are clustered around a very narrow range of outcomes. The degree of uncertainty associated with the basic price data and the methods used for compiling PPPs may cause minor differences between the price level indices and result in differences in ranking which are not statistically or economically significant.

The impact of exchange rate changes on price level indices

As explained above, the price level index for a given country is calculated as its PPP divided by its annual average exchange rate to the euro. This implies that exchange rate movements have an impact on the price level indices. The depreciation of a country's currency against the euro will make the country less expensive in comparison to euro area countries and this will be shown as decrease of the relative price level expressed in the price level index.

Main characteristics of the survey on prices for machinery, equipment and other products

The survey on prices for machinery, equipment and other products is carried out every 2 years. The last survey was carried out in April, May and June 2023. Countries collected prices for around 500 items, divided over nine sub-groups. The survey covers the 3 main sub-categories of machinery and equipment (metal products and equipment; electrical and optical equipment; and transport equipment) as well as the software category.

From the sub-groups listed as investment categories , no prices are collected for other transport equipment, boats, steamers, tugs, floating platforms and rigs, locomotives, rail-cars, vans, wagons and other rail equipment, aircrafts, helicopters, hovercrafts and other aeronautical equipment, and products of agriculture, forestry and other products. price level indices for these sub-groups are estimated taking PPPs of other sub-groups as proxy.

Prices refer to purchasers' prices including non-deductible VAT .

Main characteristics of the survey on construction prices

The 2024 survey on construction prices, published in this article, was carried out in May, June and July 2024.

Countries collected prices for a list of "bills of quantities", which are comparable construction projects such as a detached house, an office building or an asphalt road. Each bill of quantities consists of a number of chapters or major components (like earthworks, concrete, masonry, etc.) which are made up of items or elementary components (e.g. excavation of the terrain, dumping and compacting of soil).

The construction projects are divided into 3 sub-categories: residential buildings (comprising 3 bills of quantities: a detached house, an apartment building and a renovation of a detached house), non-residential buildings (comprising 2 bills of quantities: a light industrial building and an office building) and civil engineering works (also 2 bills of quantities: an asphalt road and a resurfacing of an asphalt road).

Countries are asked to collect purchasers' prices for the bills of quantities, i.e. the actual market prices paid for the elementary components, along with any additional expenses contributing to the total project cost paid by the client. Non-deductible VAT is added to these prices.

Context

Purchasing power parities (PPPs) are indicators of price level differences across countries. PPPs tell us how many currency units a given quantity of goods and services costs in different countries. PPPs can thus be used as currency conversion rates to convert expenditures expressed in national currencies into an artificial common currency, the purchasing power standard , eliminating the effect of price level differences across countries.

The main use of PPPs is to convert national accounts aggregates, like the gross domestic product (GDP) of different countries, into comparable volume aggregates. Applying nominal exchange rates in this process would

overestimate the GDP of countries with high price levels relative to countries with low price levels. The use of PPPs ensures that the GDP of all countries is valued at a uniform price level and thus reflects only differences in the actual volume of the economy.

PPPs are also applied in analyses of relative price levels across countries. For this purpose, the PPPs are divided by the current nominal exchange rate to obtain a price level index which expresses the price level of a given country relative to another, or relative to a group of countries like the EU.

The common rules for the provision of input data, and for the calculation and dissemination of PPPs, are laid down in Regulation (EC) No 1445/2007 of the European Parliament and of the Council of 11 December 2007 .

Explore further

Other articles

- Comparative price levels for food, beverages and tobacco
- Comparative price levels of consumer goods and services
- GDP per capita, consumption per capita and price level indices

Database

- Purchasing power parities (prc_ppp) , see:

Purchasing power parities (PPPs), price level indices and real expenditures for ESA 2010 aggregates (prc_ppp_ind_1)

Convergence indicators (prc_ppp_conv)

Thematic section

- Purchasing power parities (PPPs)

Selected datasets

- Purchasing power parities (t_prc_ppp) , see:

Comparative price levels (tec00120)

Price and volume convergence between EU Member States (tec00121)

GDP per capita in PPS (tec00114)

Methodology

- Eurostat-OECD Methodological manual on purchasing power parities
- Purchasing power parities (ESMS metadata file — prc_ppp_esms)

External links

- OECD - Purchasing Power Parities (PPP)
- World Bank - International Comparison Program (ICP)

Legislation

- Regulation (EC) No 1445/2007 of 11 December 2007 establishing common rules for the provision of basic information on Purchasing Power Parities and for their calculation and dissemination
- Summaries of EU Legislation: Purchasing power parities