

Standard-documentation Meta information

(Definitions, comments, methods, quality)

on

Construction Output Prices and Construction Costs

This documentation is valid from the reference period:
2016 (with the base 2015)

Status: **19.01.2017**



STATISTICS AUSTRIA
Bundesanstalt Statistik Österreich
A-1110 Vienna, Guglgasse 13
Phone: +43-1-71128-0
www.statistik.at

Directorate Business Statistics
Organizational unit Indicators, Analysis

Contact person:
Mag. Monika Erath
Phone +43-1-71128-7065
E-Mail: monika.erath@statistik.gv.at

Contact person:
Nina Goltsch
Phone +43-1-71128-7432
E-Mail: nina.goltsch@statistik.gv.at

Executive Summary

The **construction cost index** and the **construction output price index** are important components of the system of price statistics.

The construction cost index (CCI) as **input factor** observes the development of costs (materials and labour) of construction companies when performing construction activities. Over time, changes of material and labour costs for the constructors can be monitored by monthly collecting and observing price developments of representative production factors used within the construction process.

The construction output price index (CPI) as **output factor** provides information on the changes of actual prices for representative construction works on a quarterly base. This is done by observing market prices (excluding VAT) for representative individual construction activities paid by the client to the construction company. Figure 1 illustrates the difference between construction costs as input factor and construction output prices as output factor.

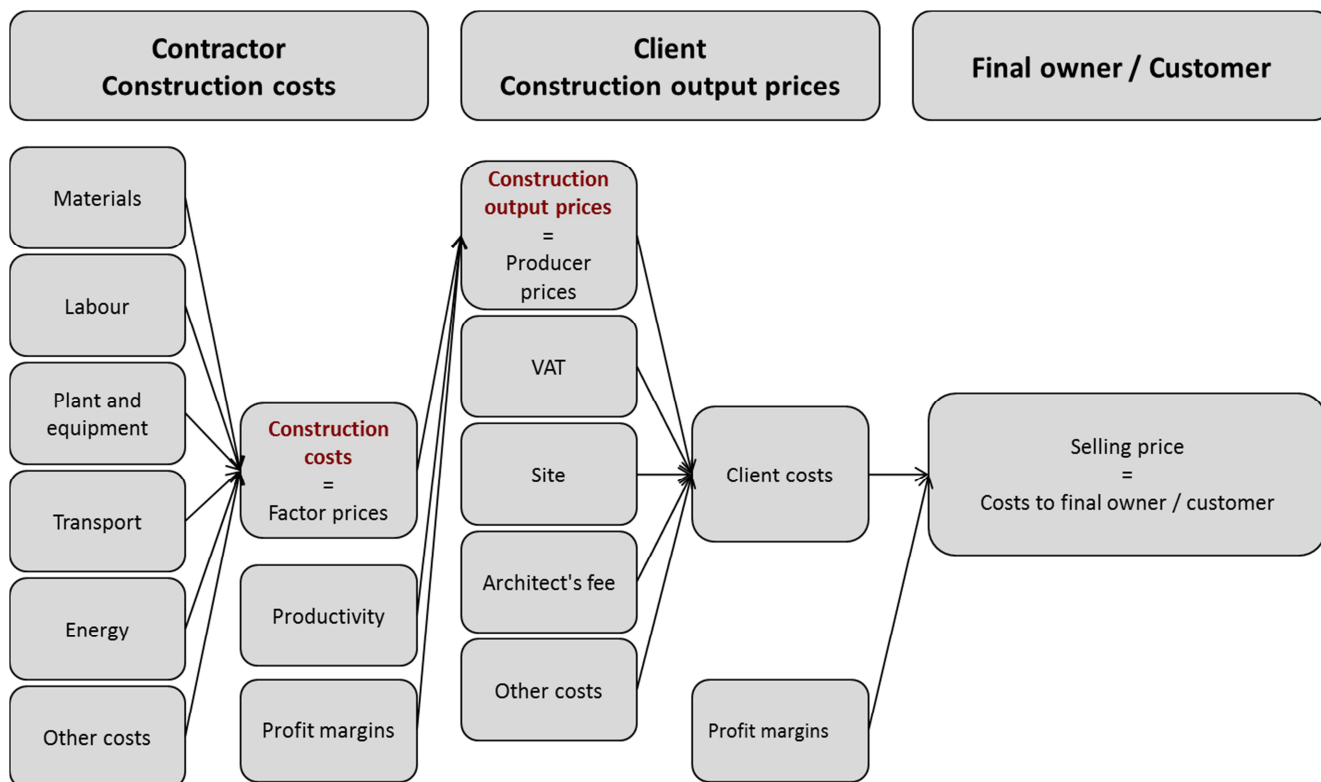


Figure 1: Difference between construction costs and construction output prices

The **construction cost index** monitors price developments of production factors used in the construction sector, like construction materials, labour and wage costs, usage of machines etc. Statistics Austria calculates the construction cost index for residential buildings as well as for road and bridge construction. Since reference month January 2017 the new construction cost index for sanitary engineering is also published. The calculation is based on a fixed basket of goods (consisting of labour and materials) and a corresponding weighting scheme regarding the actual base year and the specific construction sector.

In contrast to the construction cost index, the **construction output price index** reflects - in accordance with the current situation of the construction industry - the development of prices for construction works, payable by the client, by quarterly monitoring market prices (excluding VAT) for representative activity groups of building construction and civil engineering. This index is available for the construction sectors residential buildings, other building construction, road construction, bridge construction as well as other civil engineering. It includes not only the development of factor costs for materials and labour incurred in the construction process, but also changes in, for example, the construction companies' productivity or profit rate.

Both indices are calculated by means of **Laspeyres index**. The baskets of goods are either based on tender documents of appropriate projects or on comprehensive calculation documents referring to projects of construction of residential buildings. Weighting information for calculating the overall construction output price index as well as the regional indices of building construction is taken from short term statistics in industry and construction (production sold in 2015).

There are methodological differences in calculating the indices, as availability of primary and secondary data sources differs for each construction sector:

The **construction cost index** is compiled on a monthly base by mainly using secondary statistics (such as wholesale price index or producer price index) and only few primary collected information as well as data from trade associations.

The calculation of the **construction output price index for building construction** is based on a primary survey among 1,100 enterprises (construction companies and professionals like roofers, carpenters, locksmiths, electricians, installers...). Since 2016 due to the consolidated price regulation (as amended by BGBl II Nr. 222/2015) these enterprises are obliged to submit about 4,000 prices on selected construction works via the webbased questionnaire "eQuest" (www.netquest.at) on a quarterly base. The **construction output price index for civil engineering** is created from secondary data of tender documents for representative individual construction activities which are transmitted to Statistics Austria by provincial construction departments and other associations (about 5,000 prices per quarter).

While construction cost indices are used as a base for **valuation of contracts** with indexation or price adjustment clauses, the construction output price index is an important base for national accounts and for the calculation of the production index, where it is used for price adjustments of construction industry values.

The publication takes place monthly for construction cost index and quarterly for construction output price index. There is also the possibility to use the interactive tool "Index calculator" (available in German only) to display the index results and to calculate the change rates from different time series.

Main Features	Construction cost index	Construction output price index
Subject Matter	Measuring of <u>costs</u> occurred by the <u>construction company</u> (contractor, professionals) while carrying out the construction process for representative construction cost groups of building construction and civil engineering from each federal state by monitoring the development of factor costs for materials and labour (input variable).	Measuring of <u>market prices'</u> development as <u>output factor</u> for representative construction works, this means, monitoring of <u>market prices</u> (excl. VAT) for representative construction works <u>payable by the clients</u> to the construction companies.
Population	Costs of all construction projects of residential buildings, road and bridge construction and sanitary engineering.	Prices of all construction projects of building construction and civil engineering throughout Austria.
Type of statistics	Price indices	Price indices
Data sources/Survey techniques	<u>Price information:</u> <u>Construction of residential buildings, road and bridge construction and sanitary engineering:</u> Secondary statistics as wholesale price index, producer price index, consumer price index, trade association, collective agreements and additional primary data collection of 4 product groups. <u>Weighting information:</u> <u>Construction of residential buildings, road and bridge construction and sanitary engineering:</u> Calculation documents from appropriate construction projects.	<u>Price information:</u> <u>Building construction:</u> Compulsory primary survey with about 1.100 enterprises transmitting about 4.000 prices per quarter. <u>Civil engineering:</u> Secondary data of 9 provincial construction departments and other associations as civil engineers (quarterly about 5.000 prices) <u>Weighting information:</u> Tender documentation of appropriate construction projects
Reference period or due day	Calendar month, reporting deadline is the 15th of the month.	Quarter, reporting deadline is the 15th of the quarter's second month and for civil engineering the last day of the quarter.
Periodicity	Monthly	Quarterly
Survey participation (in case of a survey)	Voluntary	Compulsory
Main legal acts	National: BGBl. II Nr. 147/2007 (as amended by BGBl. II Nr. 222/2015) EU: ESVG, (EG) Nr. 1165/98, (EG) Nr. 1158/2005 (just housing and residential building)	National: BGBl. II Nr. 147/2007 (as amended by BGBl. II Nr. 222/2015)
Most detailed regional breakdown	Austria, no regional breakdown	Civil engineering: Austria Building construction: NUTS 1 and NUTS 2
Availability of results	Preliminary results: t+15, t+45 (1. Revision) Final results: t+75	Final data: t+40
Other: Highest aggregates available	CCI Residential building CCI Road construction CCI Bridge construction CCI Sanitary engineering (new since base 2015)	Construction output price index total (civil engineering and building construction) Further breakdown: CPPI Building construction <ul style="list-style-type: none"> • CPPI Residential building • CPPI Other building construction CPPI Civil engineering <ul style="list-style-type: none"> • CPPI Road construction • CPPI Bridge construction • CPPI Other civil engineering