

# Informations *Rapides*

## ■ Cost-of-construction index – Fourth Quarter 2011

**In the fourth quarter of 2011, the “Cost-of-Construction Index” increased by 6.85% over a one-year period**

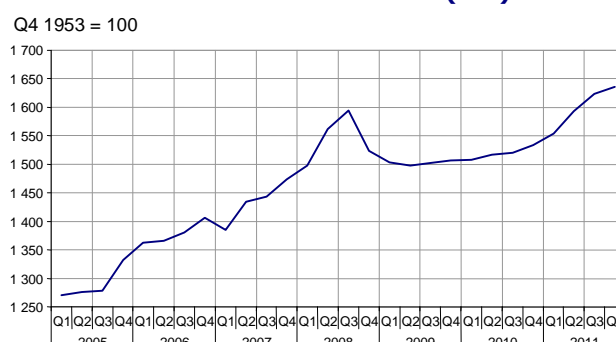
In the fourth quarter of 2011, the “Cost-of-Construction Index” (CCI) stood at 1,638 versus 1,624 the previous quarter. Over a one-year period, CCI increased by 6.85%, versus a 6.84% annual growth in the third quarter of 2011.

### Cost-of-construction index

Dates	CCI	Percentage change over a one-year period (Q/Q-4) %
2007 Q1	1,385	+ 1.69
2007 Q2	1,435	+ 5.05
2007 Q3	1,443	+ 4.49
2007 Q4	1,474	+ 4.84
2008 Q1	1,497	+ 8.09
2008 Q2	1,562	+ 8.85
2008 Q3	1,594	+ 10.46
2008 Q4	1,523	+ 3.32
2009 Q1	1,503	+ 0.40
2009 Q2	1,498	- 4.10
2009 Q3	1,502	- 5.77
2009 Q4	1,507	- 1.05
2010 Q1	1,508	+ 0.33
2010 Q2	1,517	+ 1.27
2010 Q3	1,520	+ 1.20
2010 Q4	1,533	+ 1.73
2011 Q1	1,554	+ 3.05
2011 Q2	1,593	+ 5.01
2011 Q3	1,624	+ 6.84
2011 Q4	1,638	+ 6.85

Reminder: the historical series since 1953 is available on [www.insee.fr](http://www.insee.fr).  
Source: Insee

### Cost of construction index (CCI)



Source: INSEE

### Cost of factor of production for construction (BT01 index)



Source: Ministry of Ecology, of sustainable Development, Transportation and Housing

*The method of CCI computation changed in the first quarter of 2010.*

*CCI is now compiled by econometric methods called "hedonic" that can calculate a pure price change based on characteristics of the construction observed by the survey "cost of new housings" (PRLN in French).*

## **For more information:**

### **Definition**

The French "Cost of Construction Index" (CCI) is a quarterly index, reference 100 in the fourth quarter of 1953, the date of its creation. CCI measures the price change of new buildings, having a primary (non-community) residential use in France. It is published in the [Journal Officiel](#) in the middle of the fourth month following the quarter under review. It is calculated by INSEE in collaboration with the Ministry of Ecology, of sustainable Development, Transportation and Housing.

Although established by usage, the words "Cost of Construction Index" make a misnomer since it is a price index, based on observation of construction contracts dealt between the clients and the firms delivering the building works, excluding other components that enter into the global cost of purchasing (land cost, costs associated with promoting, financing costs, etc.). The cost of construction itself is apprehended by other indicators including "index BT" calculated monthly by the [Ministry of Ecology, of sustainable Development, Transportation and Housing](#) in cooperation with the [French Federation of Building](#).

### **Calculation method**

A price index is a measure of price trends. Such a goal requires to isolate a pure price change, ruling out any effect related to changes in the content of the given product, for instance, in this case, the rising cost of housing resulting from the increase in the rooms surface and from the installation of more sophisticated equipment. In most cases, price indices are developed as follows: the current value of a sample of intangible items is collected, then is related it to how much it was recorded at a reference date. When an article is replaced by a different model, a "quality effect" is estimated, that is to say the impact of this change on the new price. We can thus determine a pure price change, by subtracting the quality effect.

The problem in construction is specific because each building is unique. It is not possible to compare prices at different periods of exactly the same construction. This forbids the simple calculation of price based on the mere observation of buildings, and blurs the perception that people can have of the inflation in the construction sector. Indeed, prices discussed here depend on a large number of parameters: configuration of the construction, materials used, installed equipment, site constraints, site and extent of the operation, nature of relationships between stakeholders (developers, house-builders, general contractors, subcontractors, clients), implementation schedule, circumstances of the deal. The computing device must be adapted to these characteristics.

The hedonic method establishes a relationship, using an econometric model, between the market price of construction and characteristics of structure, which allows to assess the implicit value of these various characteristics (area, number of floors, comfort level, geographic location and living standards of the construction site for instance). The temporal evolution of prices is captured in the model by the indicator variables of the dates. Such a method is already used by INSEE, especially for [the prices of second-hand dwellings](#). It ensures the inclusion of changes in quality of housing.

The coverage of the CCI is very broad, it includes three major types of [construction](#) for residential use: the pure individual, the grouped individual (single house in a subdivision, etc.). and collective dwellings. To account for the heterogeneity of structures, a hedonic model is defined for each type. The model coefficients are re-estimated each quarter, the models themselves are reviewed periodically. Hedonic CCI of all new housing construction results from the aggregation of these three sub-indices in proportion to the importance of each type.

The data needed in order to calculate the hedonic CCI are provided by the statistical survey on the "cost of construction index and cost of new housing (ICC-PRLN)", conducted by the Statistical Service of the Ministry of Ecology, of sustainable Development, Transportation and Housing This investigation can trace the evolution of construction prices through the monitoring of 500 cases, representing quarterly 7.000 to 8.000 new dwellings.

### **Uses**

The Cost of construction index is notably used to review the rents of commercial leases (code of trade law n ° on 2001-1168 of December 11<sup>th</sup>, 2001 art. 33 V, [Journal Officiel](#) of December 12<sup>th</sup>, 2001, articles L145-33 and L145-34).

According to the law "LME" (Law No. 2008-776 dated August 4, 2008) intended to modernize economy, two indices can be used in order to escalate commercial rents contracts: the "Cost of Construction Index" (CCI) or, if applicable, the [commercial rent index](#). Decree No. 2008-1139 of 4 November 2008 on the commercial rent index defines the activities involved and the procedures for calculating and publishing the index.

Evolutions of CCI can be compared or reconciled with indicators of cost of production factors, such as BT01, achieved each month and published in the [Journal Officiel](#) by the Ministry of Ecology, Energy, Development sustainable and Sea. Moreover, as regards the maintenance and improvement of housing, "IPEA" price indices are produced each quarter by the same Ministry and published in the collection "[Facts & Figures](#)" of the "General Commissioner for Sustainable Development".

CCI is also used for compiling the volume-price breakdown in national accounts (for activity and product "Building").

- <http://www.developpement-durable.gouv.fr/-Index-BTP-.html>
- Complementary information (historical data, methodology, web site...) are on : <http://www.insee.fr/en/themes/info-rapide.asp?id=102>
- Historical data are available on the BDM : [G1](#), [G2](#).
- Press Contact: [bureau-de-presse@insee.fr](mailto:bureau-de-presse@insee.fr)

Next issue: July 6<sup>th</sup>, 2012