

Building indices, Civil engineering indices and various indices for construction

Definitions

Building indices (BT) are composite indices measuring costs of different activities or sub-activities of construction sector : group "[41.2 - Construction of buildings](#)" and most of classes of division "[43 – Specialised construction works](#)".

Civil engineering indices (TP) are composite indices measuring costs of different activities or sub-activities of construction sector : division "[42 – Civil engineering](#)" and first classes of division "43 – Specialised construction works".

The various indices for construction, related to landscape services, engineering and road-marking products, are composite indices measuring costs of different activities linked to construction sector.

IM index, "Material assets for public works", is an updating index of value of material assets for public works, by lack of an available replacement value, estimated through their costs.

Methodology

Building indices, Civil engineering indices and various indices for construction are composite statistical indices, aggregating costs indices by 6 expense items, according to the "KLEMS" analytical accounting approach (K = capital goods "equipment", L = "labour", E = "energy", M = "materials", S = "services"), with the supplementary item T = "transport". Each cost item is itself made up of elementary indices issued from public statistics.

Costs indices and cost items are aggregated using a Laspeyres chain-linked technique, in reference 100 in 2010.

Weights are constructed following, in particular, the work carried out with professional unions.

[Labour cost is measured by the hourly labour cost index in construction](#), delayed of three months.

Cost items are obtained by aggregation of elementary indices :

$$CI(t) = CI(t-1) * \sum_{CI} weight(j, CI) * j(t) / \sum_{CI} weight(j, CI) * j(t-1)$$

where CI is the cost item, j the elementary index.

Then, BT and TP indices are obtained by aggregation of cost items :

$$I(t) = I(t-1) * \sum_{CI} weight(CI, I) * CI(t) / \sum_{CI} weight(CI, I) * CI(t-1)$$

where I is the BT or TP index, CI the cost item.

Objectives

All these indices, with the exception of IM index, are dedicated to contract escalation in construction works, notably in case of public bids. Contractors can choose closest index to the subject of their bid. These indices composed as parametric formulae of cost development in different inputs are as compliant as possible to the guide « [Le prix dans les marchés publics](#) » of Ministry of Economy and Finance.

For contracts signed before publication in Official Journal of 16th January 2015, old series are to be used until September 2014 inclusively, and, since October 2014 inclusively, old series can be extended through the multiplication of the corresponding new series by the connecting coefficient. The product obtained this way is to be rounded off to one decimal. More information has been published in [the “BDM news” section of the INSEE website](#).

IM index, “Material assets for public works”, is used for updating value of material assets, notably for valuation of fleets in case of damages. It should never be used for contract escalation, as “equipment” items have been conceived for that use.

Additional information

Most substantial methodological documentation on these series can be found on the INSEE website, respectively :

- [for BT indices](#);
- [for TP indices](#);
- [for various indices for construction](#);
- [for IM index](#).