

Manufacture producer price index

Backgrounds

Manufacture producer price indexes measure the average change in goods prices that are produced in the country, in its first sale stage. Producer prices, also called “prices at the factory gate”, do not include taxes on products, transport margins and nor margin trades.

The most important use that the Central Bank of Costa Rica (BCCR) gives to these price indexes is as deflators of the production numbers of the national accounts. It is also used as an inflation general indicator in the corresponding market to index prices and contracts, as well as a research input.

Publications

A country's "productive structure" (products and producers relative importance) changes over time, so it is recommendable to update indexes samples (products, informants and weights) to maintain their quality. Some international recognized institutions¹ suggest that this work must be carried out periodically (every 5 to 10 years).

The BCCR calculates an indicator of the manufactured goods prices evolution produced and sold in the domestic market, and since 1991 has published the following series:

- Industrial producer price index (IPPI-1991). In this indicator the weights correspond to 1989 and the mathematical base to 1991. The initial sample included 760 articles which prices were provided by 180 informants, the levels were calculated by economic activity according to the International Standard Industrial Classification (ISIC). The indicator has monthly frequency and was calculated from January 1991 to December 1999.
- Industrial producer price index (IPPI-1999). In January 2000, the BCCR published a new manufacture price index with weights that correspond to 1997 and mathematical

¹ International Monetary Fund (IMF), Organisation for Economic Co-operation and Development (OECD) and International Labour Organization (ILO), among others.

base to December 1999. Its sample increased to 929 articles and 216 informants. For this indicator there are monthly data from December 1999 to December 2014.

- Manufacture producer price index (IPP-MAN 2012). On December 2014 the BCCR suspends the IPPI 1999 calculation to make way to a new indicator that is published for the first time on February 2015, with monthly data since January 2012.

It should be noted that the three indicators mentioned above, measure the evolution of prices paid by the domestic market to the manufacturing producers. However, the term “industry”, which has been commonly used to refer to manufacturing, includes all economic activities; therefore in order to obtain more precision, the name for the new indicator is changed.

Link of series

In order to avoid a breaking off in the continuity of the three indicators mentioned, a "linkage" of the general level was made using link coefficients, calculated at the beginning of each series. This is equivalent to calculate levels for periods in which no data exist (previous to the beginning or after the ending of an indicator) through the percentage changes recorded by the predecessor or successor index. This ensures that the published percentage changes are maintained.

During the period January 2012 to December 2014, the IPPI-1999 and the IPP-MAN 2012 were calculated simultaneously. To obtain the "linked" series, the IPP-MAN changes are used in the period in which the two series overlapped², so that the historical series is constructed with the following information:

Period	Indicator
January 1991 to December 1999	IPPI-1991
January 2000 to December 2012	IPPI-1999
January 2012 onwards	IPP-MAN

As mentioned, the change in the indicator name (IPPI to IPP-MAN) responds to a semantic modification, since both indexes objective is to measure the same phenomenon.

² To attend the request of some users, the BCCR also publishes the IPPI series linked from January 2015, with the IPP-MAN percentage changes.

IPP-MAN methodological aspects

- The weights are updated to reflect the country's productive structure in 2012. This is motivated by the fact that 2012 will be the new base for the national accounts.
- The mathematical base corresponds to the weights base (2012).
- The data is grouped by products, classified according to the Central Product Classification, version 2.
- In accordance with the recommendation made by the international mission that visited the BCCR in 2009, indexes by economic activity (ISIC revision 4) were also calculated.
- The coverage of the weights and prices compilation covers the entire national territory.
- The calculation formula is “modified” or “chained” Laspeyres formula.
- The size of the articles and informants sample is increased.
- The United Nations and Organization for Economic Cooperation and Development international methodological recommendations are applied to measure more accurately price changes.

How to use the indexes?

Given that indexes respond to a geometric model, its applicability is related to the variation rates derived from its levels.

In order to facilitate the user's understanding of the percentage changes calculation and interpretation, the bank publishes the Inflation measured by IPC explanatory notes at the following address:

[https://gee.bccr.fi.cr/indicadoreseconomicos/Documentos/DocumentosMetodologiasNotasTecnicas/Metodología%20Indices/Inflación%20e%20índices%20de%20precios%20\(2018-05\).pdf](https://gee.bccr.fi.cr/indicadoreseconomicos/Documentos/DocumentosMetodologiasNotasTecnicas/Metodología%20Indices/Inflación%20e%20índices%20de%20precios%20(2018-05).pdf)