Glossary:Chain index

A **chain index** is an index number in which the value of any given period is related to the value of its immediately preceding period (resulting in an index for the given period expressed against the preceding period = 100); this is distinct from the fixed-base index, where the value of every period in a time series is directly related to the same value of one fixed base period.

This index type is called a $chain$ index because individual indices with previous period = 100 can be chained together by multiplying (and dividing by 100) all consecutive indices, thus converting them into a series of indices with the first reference period = 100. This way, the consecutive values of the index numbers form a chain, as it were, from the first (reference) to the last period.

Example

An index of December of year Y on the basis of the previous month may be calculated by dividing the value of December by the one of November and multiplying the result by 100, resulting in an index of December (November = 100). If this has been done for every month of year Y, March (February = 100) can then be converted into March (January = 100) by multiplying March (February = 100) with February (January = 100) and dividing by 100. Next, April (March = 100) is converted to April (January = 100) by multiplying it with the previous result of the chaining, March (January = 100); and so on, for each additional month.

Further information

- OECD - Glossary of Statistical Terms