## Glossary:Deflator

## Statistics Explained

A deflator is a figure expressing the change in prices over a period of time for a product or a basket of products, which is used to 'deflate' (price adjust) a measure of value changes for the same period (for example the sales of this product or basket), thus removing the price increases or decreases and leaving only volume changes.

A deflator compares a reference period to a base period, and it can be expressed either as an index or a percentage change. A value which has been adjusted by way of a deflator is called **deflated** .

## **Example**

If in one year the value of sales of a product has gone up from 100 to 120, by 20 %, but its unit price during this year has increased from 100 to 110, by 10 %, this unit price change (110) can be used as a deflator of the sales index (120), resulting in a volume change from 100 to 109.1 (+ 9.1 %):

$$120 / 110 * 100 = 109.1$$

Which deflator should be used for the elimination of prices changes depends on the nominal indicator which has to be adjusted. For example the deflator of sales is a price index which represents changes in retail prices and which allow the identification of changes in the real quantities of retail trade.

## Related concepts

- Inflation
- Volume of sales index