

## Use of price indices for adjustment

The various price indices of Statistics Denmark are widely used for adjustment of contractual amounts and amounts in other types of agreements. When you adjust an amount according to a price index, you take the price development into account.

Below you will find some general advice for using the price index for adjustment in contracts:

### Selecting an index

Choose an index that follows the price of the entity that you want to adjust. If the task is labour intensive, for example, an average earnings index is possibly the most useful index. Avoid using indexes that are seasonally adjusted as these are revised back in time, which may cause confusion.

You can choose to use the whole index or a sub-index. However, you should be aware that detailed commodity groups are associated with higher statistical uncertainty than the overall index.

### Description of the index in the contract

Define as clearly as possible which amount or payment that should be adjusted. Indicate exactly which index to use for the adjustment. To avoid any misunderstandings, indicate the full name of the index including the name of the table in Statbank Denmark.

Below you will find a few examples of how to indicate the index in your contract:

#### **Example with an overall index**

*Statistics Denmark's overall net price index, table PRIS114*

#### **Example with a sub-index**

*The index for road construction from Statistics Denmark's "Construction cost indices for civil engineering projects", table BYG61*

If relevant, you can add [...] or a corresponding official index replacing the mentioned index and measuring the same price development.

### When to adjust

Indicate in which period the adjustment must be made. Usually a month or a year. When indicating a month, it is important not just to write the index as of May, since this may cause doubt as to whether this refers to the index for the month of May or the index published in the month of May (which concerns April).

Indicate also how often the amount must be adjusted. Usually, the adjustment is made at regular intervals, e.g. every six months or yearly, which is the most common.

### **Example**

*[...] adjusted annually in January according to the development in the index from October until October.*

## **How to calculate the adjustment**

Indicate clearly in the contract how the adjustment must be calculated. In general, the amount must be changed proportionately with the change in the price index between two periods, which means that the amount must be adjusted by the development in percentage terms in the price index (see example of calculation below).

In addition, indicate how many decimals to use if the amount must be adjusted by the development in percentage terms in the price index. It is common practice to use one decimal.

In many cases, the average annual change of the price index is used for adjustment. That is the change from the average of one year to the average of the next year. You can calculate the average annual change based on the published indices. The average annual change is calculated and published for the overall [consumer price index](#) and the overall [net price index](#).

## **Example of amount adjustment**

If, for example, an amount of DKK 1,500 must be adjusted by the development in the overall net price index from October 2021 until October 2022, the index for the two periods is used as a basis:

$$\begin{aligned}\text{Overall net price index for October 2021} &= 106,7 \\ \text{Overall net price index for October 2022} &= 117,7\end{aligned}$$

The adjustment can be calculated in two ways:

1. You can calculate the percentage change and add the change to the amount that must be adjusted.

$$\begin{aligned}\text{Percentage change:} & \quad \frac{(117,7-106,7)}{106,7} & = 0.103 = 10.3 \text{ per cent} \\ \text{Change in DKK:} & \quad 1.500 \text{ DKK} * 0.103 & = 154.5 \text{ DKK} \\ \text{Adjusted amount:} & \quad 1,500 \text{ DKK} + 154.5 \text{ DKK} & = \underline{1,654.5 \text{ kr.}}\end{aligned}$$

2. The adjusted amount can be calculated multiplying the original amount by the index of the latest period and dividing by the index of the starting time period:

$$\text{Adjusted amount:} \quad 1,500 \text{ DKK} * \frac{117,7}{106,7} = \underline{1,654.5 \text{ DKK}}$$

## **Role and responsibilities of Statistics Denmark**

It is entirely up to the parties who enter into the contract or agreement which index and methods they want to apply for adjustment of an amount. Statistics Denmark does not assume any legal or financial responsibility for the application of the price indices. Statistics Denmark can assist you with information on the price indices and help you with statistical issues, but does so without responsibility on Statistics Denmark's part.