

ARTICLE – More difficult to calculate inflation

The current situation will affect the possibilities to calculate reliable measures of inflation. The problem is primarily how to deal with prices of products that are no longer consumed, and also how to collect price data. Up until now, the scope for collecting statistics has been relatively good in Sweden, but there are already certain products that cannot be purchased.

The measures introduced to limit the spread of the coronavirus across the world have also affected the capacity to measure prices. The situation has already affected the collection of price data in Sweden, although the calculations of the outcome in March should not be affected to any great extent. It is already not possible to purchase certain products at all and the basic question is how to measure the price of these products in an index with fixed yearly weights. Compared with many other countries, the scope for compiling statistics in Sweden is relatively good, but this could rapidly be limited if shops and service points have to close down.²²

Statistics Sweden's strategy

Statistics Sweden has drafted proposals for possible courses of action, in the current situation and if the situation deteriorates.²³ Statistics Sweden presents different methods that can be used to deal with product groups in which no transactions have taken place or in which it has not been possible to collect prices. For certain product groups, there is a risk that no prices at all can be collected in the months ahead. This applies primarily to different types of services such as package tours, foreign air travel, sporting events and theatre visits. The general method is then to allow price indices for products that have no or too few price observations to follow the same monthly or annual trend as similar products that can be measured. In other words, the price development for a missing product group is replaced by the development for the nearest higher aggregate in the index. If, for example, there are no theatre tickets to buy, the price development for these is assumed to be the same as for the entire "Recreational and cultural services" aggregate. If this is not a possible way forward, one will have to go up a further aggregate level.

Regarding products for which there are no relevant "higher aggregates" at all, such as package holidays, Statistics

Sweden will use a method by which the price development for a missing product group is replaced by the annual percentage change in the total CPI.²⁴

Table 3:3 shows the sub-indices that will be primarily affected. Together they have a weight corresponding to 3 per cent in the CPIF. Prices of package holidays and foreign air travel are components that vary a great deal from month to month and have a clear seasonal pattern. Using the proposed replacement model, most of this seasonal pattern will be maintained for this year as well despite it not being possible to collect any actual price observations.

The consumption pattern has already changes this year and it may change even more. This will lead to adjustments of the weights in the CPIF system going forward, which in turn may affect the price variation from month to month in the total CPIF. One example may be a temporary change in seasonal patterns in the CPIF as a result of a lower weight for foreign travel in the coming years.

To summarise, it should be pointed out that the measuring problems at present indicate that one should interpret future outcomes with particular caution.²⁵

Table 3:3. Prices affected by measurement problems

Sub-index	Weight in the CPIF
Ticket, sporting events	0.42
Cinema ticket	0.18
Theatre ticket	0.19
Admission ticket, entertainment	0.28
Admission ticket, museum	0.07
Air package holidays	1.16
Boat journeys, domestic and foreign	0.09
Foreign air travel	0.62
Total	3.01

Note. Weight in per cent.

Source: Statistics Sweden

²² In many European countries, much of the collection of prices has been stopped already due to various restrictions that prevent the measurement of prices in outlets or because outlets have closed

²³ The material was presented as an extraordinary meeting in the Consumer Price Index Board on 1 April. See the document "Hantering av effekter av Corona-pandemin i KPI och HIKP [Dealing with the effects of the corona pandemic in the CPI and the HICP] (in Swedish only) from the meeting on www.scb.se.

²⁴ Regarding services with a clear seasonal variation, a replacement method that uses monthly development would have very strange effects on the annual rate of

inflation. Therefore, a method that imputes annual percentage changes is preferable according to Statistics Sweden.

²⁵ Similar to Statistics Sweden, Eurostat has published guidelines for price measurements during the corona pandemic. These Eurostat guidelines propose methods for the HICP that are similar to those proposed by Statistics Sweden for the CPI/CPIF. See <https://ec.europa.eu/eurostat/data/metadata/covid-19-support-for-statisticians> and the document "Guidance on the compilation of the HICP in the context of the Covid-19 crisis".