

LINKING AND RE-REFERENCING THE INDEX SERIES (1985-2019, BASE PERIOD; AUG=100)

Re-referencing

The index reference period for a price index is that period for which the index numbers are set to equal 100. Re-referencing of the CPI refers to the process of changing the reference base period. This process does not revise the history of past price behavior, it simply re-scales the index numbers to a more contemporary base. The CPI has been re-referenced with a new index reference period of August 2019 = 100.

Linking the index series

Due to the changes to the commodity classification (COICOP 2018) of the new CPI, the first task in linking the new series to the old is to identify those series from the old CPI that correspond as closely as possible to the commodity/regional coverage of series for the new CPI.

In order to link the old index series to the new, it is necessary to calculate a link factor for each series. The link factor for any series is given by the ratio of the index number for the new series to the index number for the old series at the link period, which in this case is Aug 2019. That is:

$$\text{Link factor} = \frac{\text{Index (old series period } t)}{\text{Index (old series at August 2019)}}$$

The link factor is calculated below for selected commodities/commodity groupings.

Table 1: Indexes for the link period and link factors for the reference month (Example 1)

Description	Aug 2019		Link factor
	New series	Old series	
Food & beverages	100.00	111.20	=(111.20/111.20*100)
Fish	100.00	107.58	=(107.58/107.58*100)
Food & beverages (excl. fish)	100.00	112.78	=(112.78/112.78*100)
Clothing	100.00	95.58	=(95.58/95.58*100)
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Overall index	100.00	110.35	

Table 2: Indexes for the link period and link factors (Example 2)

Description	Jul 2019		Link factor
	New series	Old series	
Food & beverages	100.00	108.78	$=(108.78/111.20*100)$
Fish	96.46	103.77	$=(103.77/107.58*100)$
Food & beverages (excl. fish)	98.40	110.97	$=(110.97/112.78*100)$
Clothing	100.10	95.68	$=(95.68/95.58*100)$
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Overall index	99.36	109.65	

These data have been linked to create a continuous time series of data. Please note that it is not possible to aggregate linked indexes using the above index levels and associated weights. Linked indexes lose the property of aggregation; however, continuity across time is preserved and this is preferred.