Seasonal Products

Erwin Diewert,
The University of British Columbia and the University of New South Wales,
Yoel Finkel, Central Bureau of Statistics, Israel,
Doron Sayag, Central Bureau of Statistics, Israel.

Abstract:

The paper looks at the problems associated with constructing a Consumer Price Index when the products in scope exhibit strong seasonality; i.e., for some months of the year, some products are simply not available. Under these circumstances, a single CPI cannot serve all purposes. The paper suggests that it would be useful to construct three separate indexes under these circumstances: (i) 12 year over year monthly indexes that compare say the prices of December in the current year with the prices in December of a prior year; (ii) an annual index that treats each product in each month as a separate product in the annual index (Mudgett-Stone annual indexes) and (iii) a month to month index that compares the prices in the current month with the corresponding prices in a reference month. The chain drift problem can be avoided if similarity linking is used. The various indexes are illustrated using a data set consisting of household monthly purchases of 14 types of fresh fruit in Israel over a 6 year period.