Scanner Data in the CPI: The Imputation CCDI Index Revisited

Jan de Haan (Statistics Netherlands)

Abstract: The imputation CCDI index combines the multilateral GEKS-Törnqvist, or CCDI, method with hedonic imputations for the "missing prices" of unmatched new and disappearing items. This index is free of chain drift, uses all of the matches in the data and is explicitly quality-adjusted. We revisit the imputation CCDI index and show how it can be decomposed into the matched-item CCDI price index and a quality-adjustment factor. Preferably, a separate hedonic regression is run for each time period. We argue that double imputation, where the observable prices of the unmatched items are replaced by the predicted values from the regressions, might help reduce omitted variables bias. We also explain why the (double) imputation CCDI method will address the problem of "relaunches" even if items are identified by barcode. The method is illustrated on Dutch scanner data and compared with alternative multilateral methods.