

Missing in action: testing alternative imputation methods in price statistics

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Imputations are a critical component of any statistical computation and bear special importance for the operational aspects of price statistics. Missing prices for seasonal items are a particular challenge. The literature elaborating imputations for price statistics is repetitive on the basics, but light on technical and analytical detail. Focussing on temporarily missing prices, this paper reviews the advice provided to compilers. The performance of different imputation methods for seasonal and non-seasonal products is assessed through the use of a multi-year synthetic dataset. Tests are conducted on the most appropriate level of imputation and the robustness of the standard options presented in the manuals. Time product dummy regression is tested as an additional imputation technique.