

Seasonality and Prepackaged Software Price Indexes ^{*}

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May 5, 2008

Abstract

In this paper, we construct a seasonally-adjusted price index for prepackaged software using detailed and comprehensive scanner data. We document a large sales surge over the winter-holiday and argue that its root cause is consumer heterogeneity. Because the standard, Mudgett-Stone, price index approach does not account for this type of consumer heterogeneity, we introduce a novel approach for constructing a cost-of-living price index which explicitly accounts for consumer heterogeneity. Using this index, we find that constant-quality software prices declined at an average 16.8 percent at an annual rate over our sample period of 1997 to 2003. To demonstrate the importance of properly accounting for heterogeneity, we compare the Mudgett-Stone and our proposed index and find substantial differences in the estimates of constant-quality price decline.

^{*}We would like to thank Ana Aizcorbe for many insightful discussions. In addition, comments by Marshall Reinsdorf and other colleagues at the Bureau of Economic Analysis were helpful. The views expressed herein are our own and not necessarily those of the Bureau of Economic Analysis or the US Department of Commerce.

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