

i. Submission Type: This abstract is for Parallel Session 8A

ii. Title: "Superlative and regression-based consumer price indexes for apparel using U.S. scanner data"

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vi. Abstract: In this paper we apply and contrast several index number approaches using a scanner data set containing individual women's apparel transactions from a major U.S. apparel retail chain for the period 2004-2007. Research by Feenstra and Shapiro (2003) and others has demonstrated the difficulty of applying superlative index number theory to high-frequency time series data. The GEKS (EKS) approach recently developed and applied by Ivancic, Fox, and Diewert (2009) and deHaan and van der Grient (2009) offers a solution to this problem by adapting a multilateral index formula to time series of prices. We will estimate GEKS indexes as well as Rolling GEKS (RGEKS) indexes at the daily, weekly, and/or monthly level for different apparel item components. As is well known, apparel data present special problems for index estimation due to their rapid turnover and strong seasonally-related price trends. In addition to examining the effectiveness of the GEKS and RGEKS methods in the apparel context, we will adapt other multilateral index approaches such as the country-product-dummy method. Our research will have implications for the potential future use of these or other scanner data in the official CPI.