Comparing Two Sources of Retail Meat Price Data

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USDA's Economic Research Service has a long history of calculating meat prices at different stages in the marketing system. ERS uses data collected by the U.S. Department of Labor's Bureau of Labor Statistics (BLS) as the basis of its measure of retail meat prices. The livestock industry uses this information to make production decisions.

What Is the Issue?

Recent legislation required USDA to investigate the use of an alternative source of data on retail meat prices. The purpose of the legislation was to address livestock industry concerns regarding the quality of retail meat price data used by ERS. This report compares average retail prices calculated using data from BLS with data from grocery stores using point-of-purchase scanners to record prices. It analyzes the value of both data sets in forecasting near-term market conditions.

What Did the Study Find?

Both BLS data and scanner data have relative strengths. BLS data have several advantages over scanner data:

- BLS uses statistical sampling to select retail outlets to survey. By contrast, scanner data are volunteered by stores and may exclude certain retailers that BLS makes efforts to include.

- Because BLS uses sampling to select outlets, statistical theory implies that price averages derived from BLS data ought to be unbiased. To the extent that retailers whose price history is not captured in the scanner data set have different price structures than retailers who volunteer their data, scanner averages may or may not be biased.

- BLS data are generally available 12-20 days after the end of the month they are gathered. Because of processing issues, 7-8 weeks are required before scanner data become available.

Scanner data, in turn, have several advantages over BLS data:

- Scanner data include more meat cuts. The latest iteration of scanner data showed 188 cuts, including domestic and imported lamb. By contrast, the BLS database lists 32 meat and poultry cuts, some of which have been discontinued.

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- Scanner data provide some quantity measures. BLS data provide none. Scanner data provide an index that compares a month's sales of a particular meat cut with average monthly sales of the same cut for a base year. Scanner data also show the share of meat cuts sold at a discounted price.

- Scanner data provide a wider range of price-related statistics than the BLS data. For example, scanner data are weighted by actual sales and can be used to calculate standard deviations, not just average prices. Standard deviations are a measure of the variation in prices.

In their current form, scanner data provide a different, but not necessarily better, view of retail meat markets than BLS-based data. Given the present production lag, scanner data for meat do not appear to contribute value to the analysis.

How Was the Study Conducted?

ERS routinely uses BLS data to calculate retail composites for Choice beef, pork, broilers, whole chickens, and whole frozen turkeys. This study calculated the same composites using scanner data and compared the two data sets. This study also used an econometric analysis comparing scanner and BLS prices to determine why scanner prices are more volatile than BLS prices. Both scanner data and BLS data were then examined for their value in analyzing current market conditions.