

## Farm Share Declined Less Than Expected

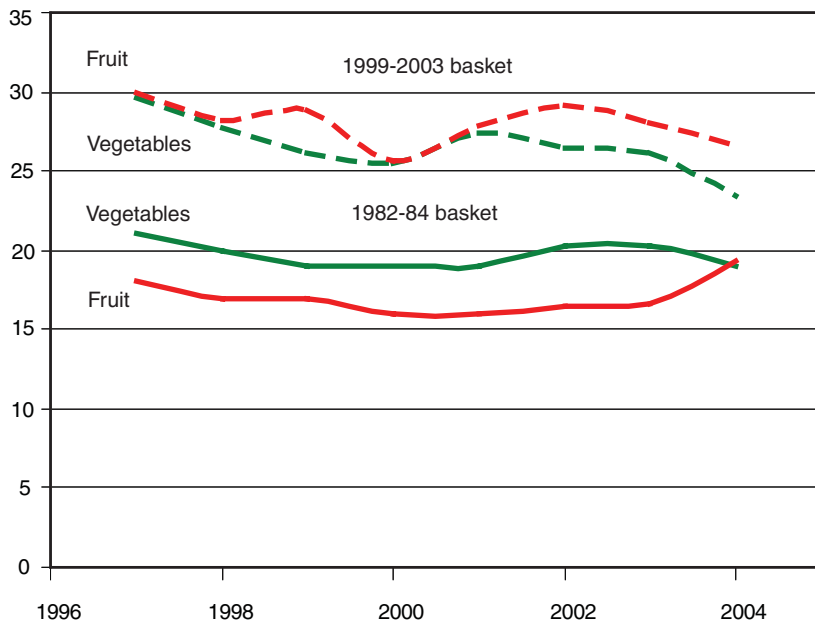
Farm share estimates based on the updated consumer baskets and the existing data series differ, as shown in table 6, table 7, and figure 1. For 2004, the estimated farm shares are 19 percent for fresh vegetables and 20 percent for fresh fruits, under the current data series. However, using the updated consumer baskets, those same shares are estimated to be 23.5 percent for fresh vegetables and 26.6 percent for fresh fruits. Both estimates are below farm shares reported by the current series for 1982 (34 percent and 33 percent, respectively), but do suggest that the existing series has subsequently overstated the decrease in farm share.

Estimates of farm contribution based on the existing and updated consumer baskets differ, in part, because the latter includes types of fresh vegetables and fresh fruits for which farmers receive relatively high prices. For example, many of the items added to the updated consumer basket for fresh vegetables have relatively high farm prices. The updated basket adds asparagus (with a relatively high farm value in 2004 of \$1.22/lb), bell peppers (\$0.34/lb), broccoli (\$0.33/lb), agaricus mushrooms (\$1.14/lb), and romaine lettuce (\$0.19/lb). By contrast, celery (\$0.15/lb), corn on the cob (\$0.21/lb), iceberg lettuce (\$0.17/lb), and onions (\$0.11/lb) are among the items contained in the updated basket in smaller quantities as compared with the 1982-84 consumer basket. The inclusion of more high-value

Figure 1

**Farm share has averaged more than 25 percent of the retail price of fresh fruits and fresh vegetables over most of the past decade, based on the updated baskets, which is greater than estimates based on the existing baskets**

Farm share (percentage)



Source: Source: USDA/Economic Research Service.

vegetables partly offsets the effects of using newer, smaller conversion factors and season-average prices to calculate farm share.<sup>20</sup>

The existing and updated series also yield different estimates of farm contribution due to differences in the estimated costs of their consumer baskets at retail. As shown in equation 3, the cost of a consumer basket in any year equals the product of the CPI in hundredths and the basket's cost at retail in the base year of the series. By this method, in 2003, the cost of the 1982-84 consumer basket for fresh vegetables is estimated at \$245.52, because the CPI for fresh vegetables was 250.5 in 2003 and the retail price of the fresh vegetables in the first column of table 3 had been previously estimated at \$98.01 in 1982-84. By contrast, households in the CE sample spent \$172 on fresh vegetables in 2003, on average. In fact, the value of the denominator in equation 3 has exceeded the average of what households in the CE spent for fresh vegetables for well over 10 years. The CPI has been widely considered to provide an upper-bound estimate for the change in consumer prices. However, since 1999, BLS has been using a methodology that promises to reduce this bias.<sup>21</sup>

The farm share of retail food prices is decreasing, but the extent of the decrease may differ if estimates are based on what households are currently buying for at-home consumption. The current market basket data series, based on what foods households purchased at retail in 1982-84, does not incorporate changes in how fresh fruits and fresh vegetables are being marketed. In fact, farmers appear to have an opportunity to provide a different mix of fresh vegetables and fresh fruits. Moreover, farmers receive higher prices for many of the items being supplied in greater quantities. However, these findings may not apply to all commodity groups, such as dairy products and meats. It is therefore necessary to evaluate how we estimate farm contribution for these other commodity groups as well.

<sup>20</sup>When estimation is based on the updated baskets, as opposed to the 1982-84 baskets, the value of the numerator in equation 3 is slightly smaller. For 2004, the former is \$43.10 and the latter is \$48.77. The reason is that I use smaller conversion factors and season-average prices to calculate farm value for the updated series. However, the difference would have been greater, if the updated baskets did not also contain more high-value vegetables.

<sup>21</sup>See box, "Methodology for Calculating CPI," p.9.