

Conclusions

The cattle cycle of the 1990's that began in 1991 reached a peak in cattle numbers of 103,819 thousand head in 1996. A drought in early 1996 resulted in a more severe cattle sell-off than would probably have occurred otherwise, possibly shortening the consolidation period that often follows an expansion phase of the cattle cycle or perhaps shortening the entire cycle. The increased sell-off of cattle during 1996 was accompanied by the second lowest real net receipts above cash costs since 1913. Total beef production has been above 25 billion pounds since 1994 and was 25.7 billion pounds in 1998, the same as the peak in 1976.

The percentage increase in cattle numbers from the beginning of the 1991-to-present cycle was the second lowest since the cattle cycle that began in 1913. The smallest percentage increase in cattle numbers and the shortest expansion phase for a cattle cycle was the previous cycle of the 1980's. Interestingly, total beef production has trended upward since at least the late 1940's, and the last three cyclical peaks in total beef production have been within a billion pounds of each other. The large bulge during the late 1970's is the only significant change in this trend since World War II.

However, nothing in the data suggests that the adverse profit situation of 1996 that prompted the latest round of packer concentration studies was unexpectedly worse or out of character for where the cattle industry was in 1996 in terms of the cattle cycle of the 1990's. The research reported here did not find cattle inventory numbers or net returns to cow/calf producers above cash costs to have fluctuated during the 1990's beyond what would have been expected at least 95 percent of the time. Further, our estimates imply that, while there was a shift in pricing system behavior during 1992 to 1996, the shift raised prices for live cattle, wholesale, and retail beef prices higher than they would have been, given their earlier patterns of reaction to supply and demand shocks. The farm-wholesale price spread has been unaffected by the shift, and the wholesale-retail spread has declined. The out-of-sample forecasts, based on coefficients using 1979-91 data, are generally lower than in-sample forecasts, further evidence that the recent shifts in the system actually led to higher prices.

One of the notable features of beef prices is that farm and wholesale prices are more volatile than retail prices. Also, it often appears that retail prices are following farm and wholesale prices. That is, retail prices tend to go up a month or more after the others go up and drop a month or more after the others drop.

Grain Inspection Packers and Stockyards Administration (GIPSA) summarized its work as follows (USDA, 1996):

The findings of the extensive literature reviewed were inconclusive about the effects of concentration, primarily because of limitations in the methods or data, or both, in the literature reviewed. While the body of evidence from the literature was insufficient to support a finding of noncompetitive behavior, it also cannot conclude that the industry is competitive (p. 55).

Azzam and Anderson's portrayal of the difficulty in assessing the competitiveness from available data held true for another of the studies contracted by GIPSA titled Effects of Concentration on Prices Paid For Cattle. The GIPSA summary states:

The analysis did not support any conclusions about the exercise of market power by beef packers. It appears that improved models are needed to more fully incorporate relevant determinants of firms' behavior (p. 36).

The effects of market concentration are widely debated and were included in the analyses here, with interesting results. Slaughter concentration effects were represented in our model specifications by the HHI. Coefficient estimates for the HHI indicate that: (1) increasing HHI was significantly associated with higher prices and narrower

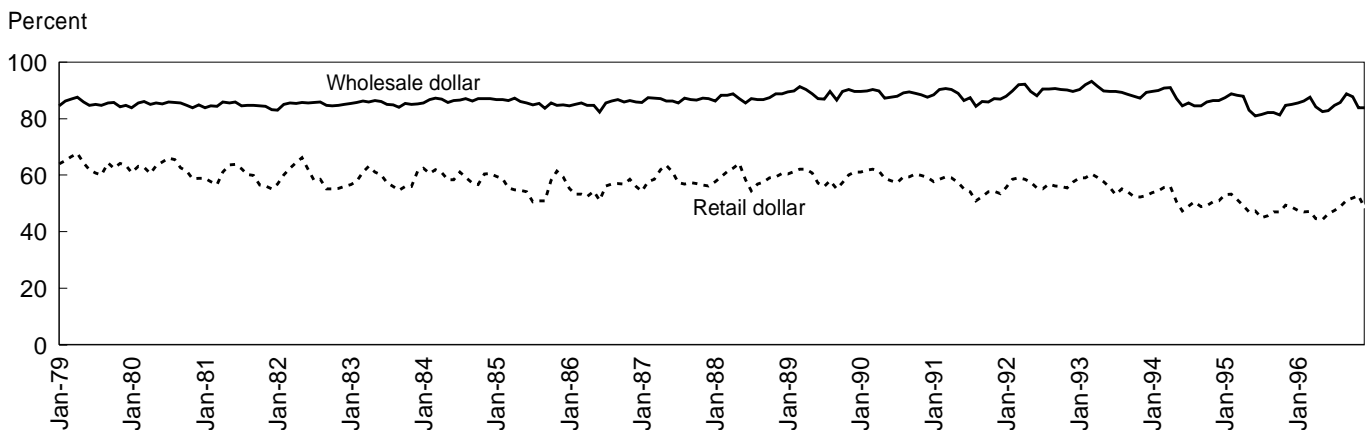
farm-to-wholesale spreads, (2) increasing slaughter concentration is associated with higher farm prices, and (3) other factors not identified in our analysis were associated with size and concentration have been more important than monopsonistic price effects. Despite these results that suggest that packers do not appear to be exercising market power, it is also clear that with concentration measures of 80 percent or higher, the potential for exercising market power in the industry does exist. Continued monitoring of market concentration and additional research into better measures of the existence and use of market power would be helpful.

Beef producers have expressed concern over the low prices and low producers' share of the retail dollar. Most of their attention has been directed at beefpackers, even though the largest part of the spread between farm and retail occurs between the packer and the retailer.

Figure 16 shows that the producers' share of the wholesale dollar has been more stable than the producers' share of the retail dollar, which has trended roughly downward since the end of the 1970's. While it is true that the producers' share of the wholesale dollar hit its lowest value in the 1979-96 period in June 1995, it also hit its highest value in March 1993. The minimum value in June 1995 is also similar to the lower values in the whole time period.

A notable feature of the producers' share of wholesale dollars in the 1990's has been an apparent increase in volatility that has led to occasions with unusually high shares. The largest producers' shares occur in the 1990's. The picture is much different for the producers' share of the retail dollar. Most of the largest shares occur early in the time period. The lowest 30 shares in this sample occur in the 1990's.

Figure 16
Beef producers' shares of wholesale and retail dollars, January 1979-December 1996



Source: USDA, ERS.