Testimony of

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"Monopsony Issues in Agriculture: Buying Power of Processors in Our Nation's Agricultural Markets."

Given by:

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My name is DeeVon Bailey. I am a professor and extension economist in the Department of Economics at Utah State University. I grew up in the small community of Paradise, Utah working on my father's farm and my grandfather's ranch. I managed our family's cattle ranch for two years following my uncle's death in a farming accident. I love the cattle business, but also know first hand the inherent business risks associated with that business. I believe I also understand the concerns producers have about the changing structure of U.S. agriculture, especially in regard to packer concentration. I would like to begin by providing a few details about the U.S. meat industry and then discuss some recent research I have been involved with relative to this industry.

In general, the packing industry has done a very good job of positioning itself to be cost competitive. Efforts to improve efficiency through reducing costs are a central theme of the packing industry and have resulted in more meat being available at lower real prices to U.S. consumers and our trading partners than ever before. For the most part, consumers trust the meat inspection system and the U.S. has been spared any general consumer hysteria about meat safety such as has been experienced in Europe, Japan, and more recently Canada with their BSE (Bovine Spongiform Encephalopathy) crises.

The livestock market lacks some of the characteristics associated with classically-defined competitive markets. Processing firms are few and very large. In the case of beef, only three firms account for a large share of the market. While the existence of large firms does not guarantee non-competitive behavior, many livestock producers are concerned about the potential these firms have for exercising market power. Indeed, the most noteworthy feature of the U.S. livestock marketing system during the past 15-30 years has been this movement toward fewer and larger firms mostly at the processing level but also at the farm or feedlot level. For example, the market share of the four largest firms (CR4) for slaughtered steers and heifers grew from 30% in 1978 to 79.6% in 2002. However, the CR4 in 1992 was 77.8% indicating very modest

growth in the market share of these firms during the last decade. The hog slaughter CR4 has also grown modestly from 49% in 1996 to about 56.7% in 2002 (USDA, GIPSA). Large feedlots (over 32,000 head capacity) account for almost two-thirds of all fed steers and heifers in the U. S. (USDA, GIPSA).

Concentration has also increased at the food retail and distribution levels. Large retailers have also become major players in food retailing. Large retailers provide low-cost, convenient access to food products. As a result, large retailers may in fact be replacing, at least to some degree, large processing firms as the market "captains" of the food marketing chain.

In 1999, a colleague, Lynn Hunnicutt, and I entered into a cooperative agreement with USDA, GIPSA. This agreement gave us access to a confidential dataset reporting all of the individual transactions for four beef packers in a single, major beef production area of the country over a 15-month period during the mid-1990s. The data included information on packer purchases from over 300 feedlots during the study period. The purpose of our research was to examine the effect of transaction costs on the stability of packer-feedlot relationships.

In a competitive, cash market, both packers and feedlot operators should, theoretically, have choices about when and with whom transactions take place. If relationships within cash markets are found to be rigid, that is that market participants tend to have exclusive relationships with each other time, then several possible economic reasons might explain this behavior. One possible explanation for rigid exclusive business relationships might be that packers exercise control over feedlots by somehow dictating the terms under which transactions take place. Another possible explanation for exclusivity is that all feedlots offer about the same price for cattle of the same quality, but that some feedlots and packers simply are able to conduct business at a lower cost than they would if they dealt with other feedlots and packers. In other words, exclusivity may benefit both packers and feedlot operators because transactions costs are minimized by doing so. A final possibility is that exclusivity expresses itself because one packer simply consistently offers a higher price to a feedlot operator for his/her cattle and, as a result, the feedlot consistently sells to that packer.

Economic theory suggests that if large firms compete vigorously with each other that their market shares will be unstable (Gort). Using a spatial statistic technique, we conducted two tests. Our first test was less restrictive than the second and found that, depending on the definition of the spatial statistic, the majority of feedlots (59% to 86%) sold primarily to just one packer (primary buyer) (Table 1). A few feedlots had two primary buyers but almost none of the feedlots had three primary buyers.

Our second test determined if feedlots tended to sell all of their cattle only to primary buyers. We broke the data into two-week time periods (a typical planning horizon between when cattle are purchased and eventually processed) to determine if feedlot operators tended to "switch" between packers from time to time. We found that when feedlot operators sold cattle, they almost always sold all of their cattle to their primary buyers (Table 2). For example, for all transactions (both cash and contract) during the study period feedlots sold only to their primary buyers 80% of the time. This means that if the feedlot operator offered cattle for sale during ten of the two-week periods, he/she sold cattle only to the primary buyer in eight of those ten periods. Most feedlots sold only to their primary buyer(s) in all cases since the median percentage of periods

when transactions were only with the primary customer was 100%. This suggests that feedlots did little switching from their primary buyers during the study period and indicates that exclusive and very stable relationships existed between feedlots and packers during this 15-month period.

We tested the reasons for why exclusive, stable relationships existed between these feedlots and packers using regression analysis. We found that the level of previous dealings between a feedlot and a packer significantly influenced the proportion of cattle the feedlot operator sold to that same packer in the current time period. Also, downward adjustments in the proportion of cattle sold by a feedlot to an individual packer were larger than upward adjustments but were done only infrequently (5% of the possible cases). This suggests that once a business relationship has been established between a feedlot and packer that that relationship is more likely to continue in the future than if no previous relationship existed. It also suggests that feedlots frequently make incremental upward adjustments in the proportion of cattle they sell to a primary buyer but that downward adjustments are made infrequently (Tables 3 and 4).

Our results indicate that previous proportions, used as a proxy for all transaction costs, and the presence of a contracting relationship between a feedlot and packer all influenced the proportion of sales between the feedlot and packer. Other proxies for transaction costs, such as feedlot size and market volume, were not shown to have a statistically significant influence on the proportion of sales from a feedlot to a packer. Unfortunately, we had only information about successful bids for cattle and not all the bids that were placed on cattle. As a result, we could only test for adjustments in proportions sold by using the average price packers paid for a base type of cattle (choice, yield grade 3 steers). Although the "sign" for the test was positive as expected, the test could not yield a reliable conclusion since the parameter estimate was not statistically significant.

The results of our analysis suggest that relationships between packers and feedlots can be understood in part through transaction costs. Consequently, these relationships may be mutually beneficial to both packers and feedlots. Perhaps the most important finding in our research is the necessity of incorporating transaction costs into economic models of this industry.