



Beef Packers' Captive Supplies: An Upward Trend? A Pricing Edge?

By Clement E. Ward

Captive supplies in fed cattle procurement have been a major concern and divisive issue in the beef industry for nearly two decades. The issue has sparked lawsuits, protracted debates among cattlemen, and research by agricultural economists.

Issues related to captive supplies contributed to producer support for the Livestock Mandatory Reporting Act, which required packers to report considerable detail regarding their livestock purchases to the United States Department of Agriculture (USDA) Agricultural Marketing Service (AMS). Alleged "sweetheart deals" offered to selected large feedlots by large packers were thought to unfairly harm smaller cattle feeders. Limited data and information on how packers procured fed cattle were believed to hinder cattle feeders in price discovery. As a result, there was a push to move from voluntary to mandatory price reporting.

Implementation of the Livestock Mandatory Reporting Act began in April 2001. One immediate effect of the act was to create new data series on prices and quantities of fed cattle procurement, some of which pertain to captive supplies. New data in the first three years since mandatory price reporting (MPR) began provide insightful information regarding packer procurement (and cattle feeder marketing) methods.

Captive Supplies Before Mandatory Price Reporting

Captive supplies are slaughter livestock that are committed to a specific buyer (meatpacker) two weeks or more in advance of slaughter. The three most common captive supply methods are marketing/purchasing agreements, forward contracts, and packer feeding. A common element of these procurement methods is that packers have a portion of their slaughter needs purchased two weeks to several months prior to the livestock being slaughtered. A key issue is whether captive supplies can be used as leverage by

packers to pay lower prices for fed cattle purchased in the cash market.

Official data on captive supplies are from the USDA Grain Inspection, Packers and Stockyards Administration (GIPSA, 2002, 2004). GIPSA began requiring packers in 1988 to report monthly procurement of fed cattle by captive supply methods. In 1994, AMS began reporting data on non-cash-market shipments of fed cattle. This series, called *additional movement*, became a proxy for some people regarding the extent of captive supplies. However, although it included shipments of cattle that constituted captive supplies, it also included shipments of cattle priced by methods not defined as captive supplies.

Captive Supplies After Mandatory Price Reporting¹

Annual Averages

Negotiated pricing on average over the three-year period accounted for 46.1% of fed cattle marketing (Figure 1). In 2003, negotiated pricing represented the majority of fed cattle procurement (53.9% of the total). Formula pricing averaged 43.3% of fed cattle procurement for the three-year period and was the most used procurement method in 2001 and 2002. However, it declined sharply to 34.0% in 2003. According to cattle feeders who responded to a 2002 survey in Iowa, Nebraska, Kansas, and Texas, most formula price arrangements are tied to the cash market—either a quoted market price or a plant average price (Schroeder, Ward, Lawrence, & Feuz, 2002).

1. In this article, year 2001 refers to April 2001 to March 2002, 2002 refers to April 2002 to March 2003, and 2003 refers to April 2003 to March 2004. Data for this article were compiled by the Livestock Marketing Information Center from AMS reports. See more detail in Ward (2004a, 2004b).

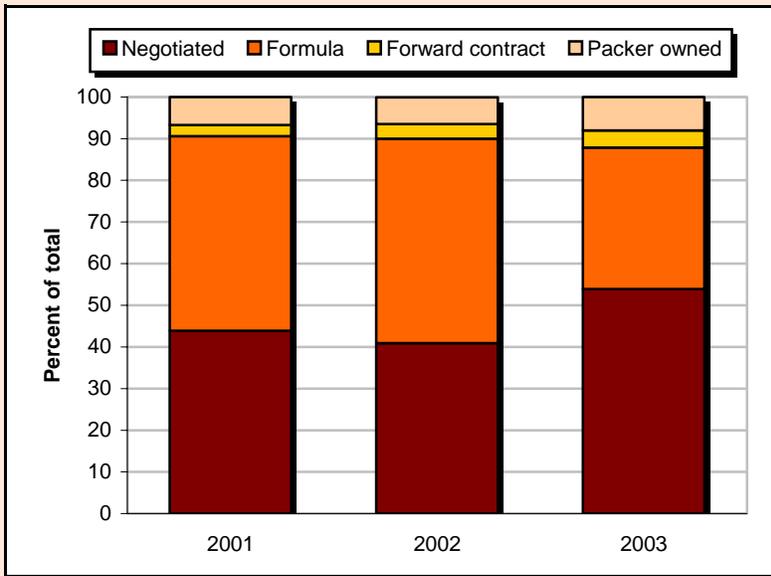


Figure 1. Average annual percentage of fed cattle purchases by procurement method since mandatory price reporting, April 2001 to April 2004.

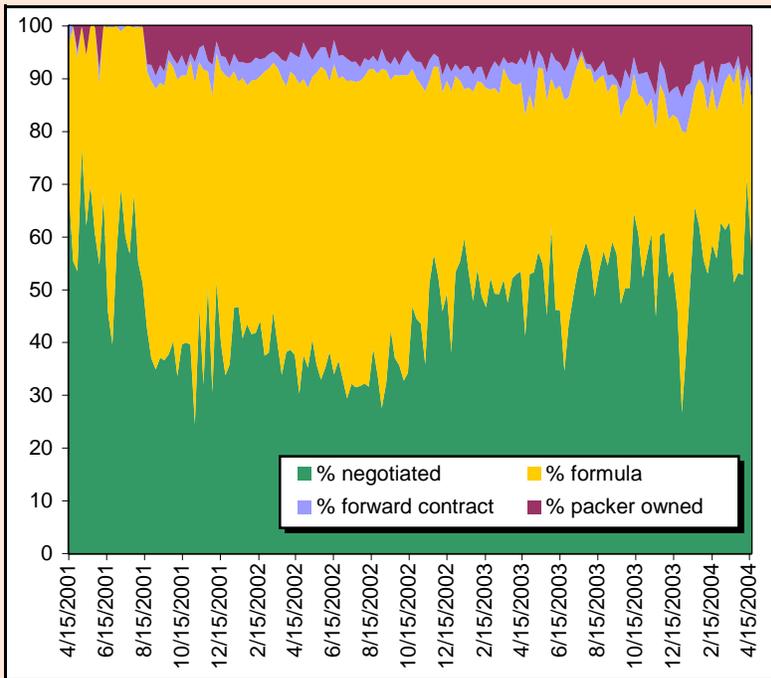


Figure 2. Average annual percentage of fed cattle purchases by procurement method since mandatory price reporting, April 2001 to April 2004.

Forward contracting, which consists mostly of basis contracts between packers and cattle feeders, represented a small percentage of fed cattle procurement each year. Forward contracts averaged 3.5% of packers' procurement for the three

years. Packer ownership of livestock, one of the most discussed components of captive supplies and a frequent target for legislative reform, accounted for 7.1% of total fed cattle procurement on average for the three years.

Weekly Dynamics

Figure 2 shows the weekly percentage of negotiated, formula-priced, forward-contracted, and packer-owned trades for the first three years since MPR began. For any given week, the percentage of negotiated pricing was as low as 24.5% and as high as 76.9%. Generally, negotiated pricing can be interpreted as cash market pricing. Formula pricing also varied widely from week to week, ranging from 22.1% to 64.8%.

For the other two procurement methods, there was considerable week-to-week variation, but the variation was of a much smaller magnitude. The range for forward contracts was 0.2–9.4%, and the range for packer-owned cattle was 2.6–13.6% of total fed cattle procurement. Week-to-week variation in negotiated trades and formula-priced trades is extensive, both on a percentage basis and in absolute volume traded. At times over the three years, formula pricing exceeded negotiated trades, and at times, the reverse occurred. The exact reason for the variation or apparent tradeoff between these two pricing methods is not clear.

Forward contracting was the least used pricing alternative over the three years. Basis contracts are dependent on the expected cash minus futures market basis, supply-demand market conditions, and the willingness of both sides to contract and take an appropriate position in the futures market. Prior to MPR, there were no weekly data on the extent of packer ownership of fed cattle, only the annually reported figures released later by GIPSA. The extent of packer feeding was reasonably stable over the three years, ranging in most weeks between 5% and 10% of total procurement but exceeding 10% on occasion in 2003.

Estimating Captive Supplies

MPR has generated additional information on packer procurement, but it is difficult to compare AMS data with GIPSA data. What is the true extent of captive supplies? Some might argue that captive supplies constitute the sum of formula pricing, forward contracting, and packer-owned procurement by packers. For two of the three categories (forward contracting and packer ownership), this argument is seemingly clear, though there could be exceptions. For formula pricing, the argument is much less clear. Many formula-priced trades are associated with supply contracts or marketing agreements. Many of those agreements allow feeders to determine the delivery date for fed cattle one to three weeks prior to harvest, either alone or in conjunction with the participating packer.

For purposes here, I assume that three types of procurement methods (formula-priced transactions, forward contracts, and packer ownership of fed cattle) comprise captive supplies. This set of procurement methods effectively establishes a near-maximum extent of captive supplies from the weekly MPR data. Combining data reported earlier, captive supplies accounted for 56.1% of fed cattle procurement in 2001, 59.0% in 2002, and 46.1% in 2003. Although the level of captive supplies no doubt concerns some, there is no apparent upward trend in the percentage based on the first three years of MPR data.

Pricing Method Data from Mandatory Price Reports

Additional information is available since mandatory price reporting began for negotiated pricing, formula pricing, and forward contract pricing

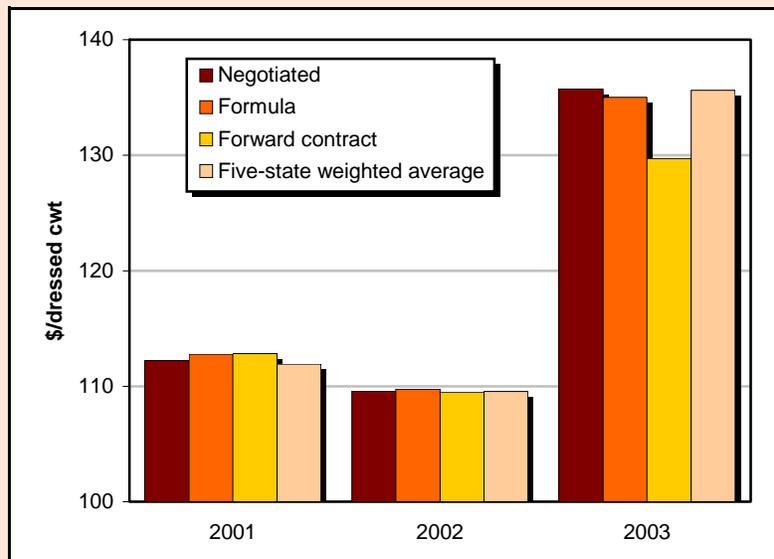


Figure 3. Average annual price of fed cattle purchases by procurement method since mandatory price reporting, April 2001 to April 2004.

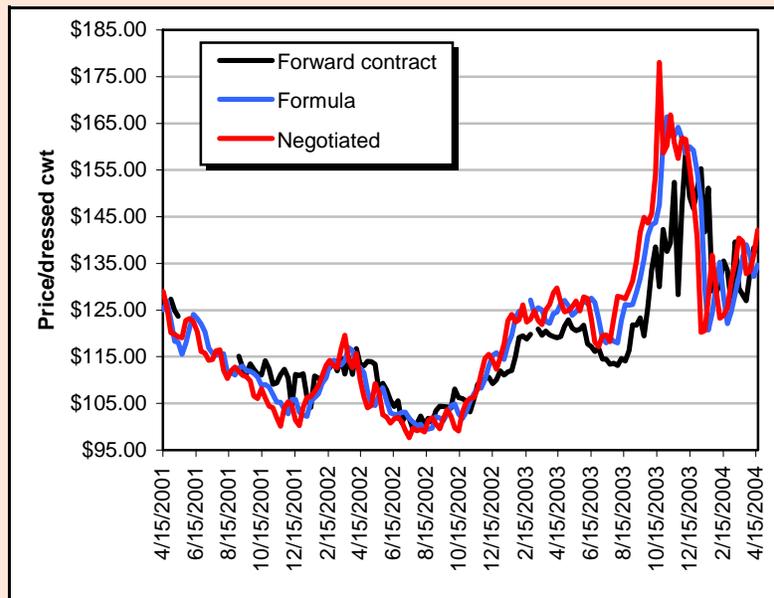


Figure 4. Weekly negotiated, formula, and forward contract dressed steer prices since mandatory price reporting, April 2001 to April 2004.

of fed cattle. Price data are not reported for packer-owned cattle, because those cattle are transferred internally from one business area of the company (cattle feeding) to another (slaughter-fabrication).

Summary of Prices

Price comparisons are on a dressed weight basis, and the five-state

weighted average price includes prices for all grades of fed cattle purchased from several major cattle-feeding states (Texas-Oklahoma, Kansas, Nebraska, Colorado, and Iowa-So. Minnesota). It could be argued that the five-state weighted average price is the most comprehensive and representative of market conditions in the cash market. Here,

the five-state weighted average steer price is used as the base or standard for comparing prices reported by procurement methods.

Negotiated prices for the three years together averaged \$0.14/cwt above the five-state weighted average price (Figure 3). On an annual basis, negotiated prices averaged as little as \$0.04/cwt higher than the five-state average in 2002 to as much as \$0.29/cwt in 2001. Formula prices averaged higher than other pricing methods or the five-state average in some years and lower in others. For the three-year average, formula prices were \$1.43/cwt higher than the average for forward contracts and \$0.07/cwt higher than average negotiated prices.

Forward contract prices varied the most relative to other pricing methods. They were \$0.06–0.91/cwt higher than comparison prices in 2001. However, in 2003, forward contract prices were \$6.02/cwt below negotiated prices and \$5.31/cwt below formula prices. This large price difference is likely related to the nature of pricing basis contracts.

One of the major concerns with some producers is whether there are special “sweetheart deals” between packers and feedlots. Given the annual average prices reported here, although sweetheart deals may exist, there is no significant advantage on average with formula prices relative to other procurement methods or the more broadly reported five-state weighted average price.

Comparison of Negotiated, Formula, and Forward Contract Prices

Comparing each of the price series for pricing methods to the broader weighted average price is important to identify similarities and differences. In a comparison of weekly weighted average dressed steer prices

versus negotiated prices for the three years since MPR began (not shown here; see Ward, 2004a), there appears to be no distinguishable difference between prices.

One of the major concerns for many supporters of MPR was the presumed favorable relationship of formula prices relative to negotiated prices. Figure 4 compares weekly negotiated prices, formula prices, and forward contract prices for the first three years of MPR. Because the weighted average dressed steer price was indistinguishable from negotiated prices, we compare formula prices and forward contract prices graphically with reported negotiated prices. Between formula prices and negotiated prices, there is a noticeable difference in many weeks. Do those who formula price receive preferential prices? The answer appears to be yes—sometimes—and no—sometimes.

Recall that the price difference on average between negotiated and formula prices was just a few cents per hundredweight and favored formula prices two of the three years. A partial explanation may be gleaned from Figure 4. Negotiated prices tend to be lower than formula prices on a declining market. Conversely, formula prices tend to trail negotiated prices on a rising market. Many base prices in grids are formula prices tied to last week’s cash market—either a reported cash market price quote or the average cost of fed cattle at the packer’s plant where the cattle will be harvested. Therefore, a closer relationship is expected between this week’s formula prices and last week’s negotiated prices, compared with this week’s negotiated prices and this week’s formula prices.

A comparison of forward contract prices with negotiated prices shows that forward contract prices

deviate sharply from negotiated prices in some weeks. With basis contracts, packers bid a futures market basis in the month fed cattle are expected to be harvested, and cattle feeders can pick the fed cattle price anytime before delivery of the cattle. Thus, cattle feeders determine when the futures market contract price has peaked for the expiration month just after the cattle will be harvested. As a result, this week’s reported forward contract prices may or may not be closely aligned with this week’s negotiated prices.

Summary observations can be made regarding the above comparisons. First, prices for the three procurement methods track each other relatively closely in general. Each is generally representative of broad market conditions but not of what might be affecting prices within and between weeks. However, less reliance should be placed on forward contract prices as an indicator of current market conditions compared with either negotiated or formula prices.

Second, no single pricing method has been consistently higher or lower than any other. This seems especially important, given the concerns regarding captive supply prices versus cash market prices. Neither of the two pricing methods typically associated with captive supplies is consistently above cash market prices. However, there appears to be differences associated with rising or declining prices that could be important in choosing one marketing method over another.

Final Assessment

Is there more information available on the volume of captive supplies since mandatory price reporting? Yes. The extent of captive supplies can be

tracked now with weekly data. Although the data do not present an exact picture of captive supplies, most would likely conclude the new information is insightful and an improvement.

Moreover, more price information by procurement method is available since mandatory price reporting was established. This availability enables tracking prices by procurement method and making comparisons that were not previously possible.

One final comment is appropriate. It bears repeating that the data on captive supplies using the AMS mandatory price reports does not match exactly the definition GIPSA has used for captive supplies. Thus, although there is both more timely and more information on captive supplies from mandatory price reports, caution must be exercised in using the AMS data to estimate the exact extent of captive supplies.

For More Information

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