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# Boxed Beef & Fed Cattle Price Spread Investigation Report

July 22, 2020

# BOXED BEEF AND FED CATTLE PRICE SPREAD INVESTIGATION REPORT

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# BOXED BEEF AND FED CATTLE PRICE SPREAD INVESTIGATION REPORT

## Introduction

The markets and processing systems responsible for the production and sale of U.S. beef were disrupted by two separate events in 2019 and 2020. The first occurred when the Tyson Fresh Meats (Tyson) beef packing plant in Holcomb, Kansas closed for four months following a fire at the facility on August 9, 2019, which disrupted processing systems and markets. The second occurred as COVID-19 spread throughout the U.S. in 2020, which resulted in further and more significant market disruptions.

In the weeks and months after both events, the difference – or spread – between the Choice boxed beef cutout values and dressed fed cattle prices rose to records levels. In response to the rising spreads, the Secretary of Agriculture directed the U.S. Department of Agriculture's (USDA) Agricultural Marketing Service (AMS) to investigate the fed cattle and beef market impacts from the Tyson fire and then expand the investigation to include the COVID-19 impacts. The purpose of the investigation is to examine whether any regulated entities violated the Packers and Stockyards Act by taking advantage of the situation through price manipulation, collusion, restrictions of competition, or other unfair practices.

This report, prepared by AMS in coordination with USDA's Office of the Chief Economist, first summarizes market conditions, fed cattle prices, boxed beef values, and the spread before and after the fire and plant closure at the Tyson Holcomb plant. The report then summarizes market conditions, fed cattle prices, boxed beef values, and the spread before and during the COVID-19 pandemic. It does not examine potential violations of the Packers and Stockyards Act. The investigation into potential violations is ongoing, and therefore, AMS has limited ability to publicly report the full scope and status of the investigation.

## Summary of Market Impacts of the Tyson Holcomb Fire

The closure of the Tyson beef packing plant in Holcomb, Kansas, following the August 9, 2019 fire at the facility, disrupted the markets and processing systems responsible for the production and sale of U.S. beef. The plant accounted for approximately five to six percent of the nation's beef processing capacity. The largest difference – or spread – between the dressed fed cattle price and the Choice boxed beef cutout value (since the inception of Mandatory Price Reporting[1] in 2001) was recorded at $67.17/cwt. after the Tyson Holcomb fire. That record was later exceeded following the COVID-19 pandemic in 2020 discussed later in this report.

This report's analysis takes into consideration: trends and conditions in these markets before the fire; seasonal demand for beef heading into the Labor Day holiday weekend; packers, cattle sellers, and beef buyers' responses to the plant closure; and the impacts on dressed fed cattle

[1] https://www.ams.usda.gov/rules-regulations/mmr/lmr

prices and Choice boxed beef cutout values. Key observations from this analysis include the following:

1. The timing of the fire in early August coincided with the seasonal increase in boxed beef demand leading up to the Labor Day holiday weekend. Typically, many retailers make pricing and promotional decisions several weeks in advance of the Labor Day holiday.
2. Futures prices for fed cattle decreased significantly in the days immediately after the fire. Fed cattle markets then followed with price decreases.
3. Shortly after the fire, packers increased their processing volume primarily through the addition of Saturday slaughter shifts.
4. There was a marked drop in the number and percentage of negotiated cash sales of fed cattle immediately after the fire.
5. The plant closure appeared to affect the spread between boxed beef values and fed cattle prices. The spread between the two peaked at a then-record high of $67.17/cwt. the week ending August 24, while the same week in 2016-2018 averaged a spread of $27.66/cwt., leaving a difference of $39.51/cwt. or 143 percent.[2]

## General Beef Industry Market Conditions Pre-Fire

USDA Market News collects industry data from a number of data sources on boxed beef cutout values, fed cattle prices, and calculates the spread between boxed beef cutout values and fed cattle prices. AMS also collects data on the percentage of fed cattle purchase types and beef production. These data are shown in Figures 1 through 6, and the sources of the data are footnoted in this report.

In the weeks prior to the fire, market conditions were stable, roughly in line with seasonal trends expected in cattle and beef markets. The *Cattle on Feed* report estimated 11.5 million head of cattle on feed on July 1, 2019, the highest July inventory since 1996. The ratio of heifers to steers steadily increased from 2018 to 2019, resulting in lighter overall carcass weights. The lighter carcass weights reduced projections for overall beef production despite the increased inventory of cattle on feed.

Fed cattle prices moved lower before partially recovering from June to July 2019, while beef prices declined over the same period (Figures 1 and 2). Based on historical data, the beef price decline was to be expected, as July typically sees a reduction in boxed beef demand following the Independence Day holiday before it rebounds through August as Labor Day approaches. Conditions prior to the fire appeared consistent with this expectation, and the negotiated Choice cutout value ended July down 3 percent from the previous month.

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[2] The difference between the weekly average negotiated Choice boxed beef cutout value and the weekly average negotiated price for steers and heifers sourced from the National Weekly Direct Slaughter Cattle - Negotiated Purchases report using an average of the dressed basis and live basis prices where the live basis price is converted to a dressed basis by dividing by an average steer/heifer dressing percentage of 63%. This places cattle prices on a dressed basis for comparison to the Choice beef cutout.

With cattle prices increasing in July and beef prices decreasing, the spread between the dressed weight prices paid for fed cattle and Choice cutout values narrowed to $31.04/cwt. by the end of the month (Figure 3).

## Plant Closure and Initial Market Reactions

The fire occurred mid-evening on a Friday when many cattle and beef marketing institutions had closed for the weekend. At the time of the fire, industry estimates indicated the Holcomb plant was harvesting approximately 30,000 head of fed cattle each week, accounting for 5 to 6 percent of the weekly U.S. fed cattle slaughter totals. Tyson indicated that due to the excessive damage, including a partial roof collapse, the plant would be closed for an unknown period of time.

### *Impact on Production*

USDA Market News collects packer self-reported estimates of daily fed cattle slaughter and releases that report every weekday.[3] Immediately following the fire, packers reported that slaughter numbers for every day of the first week post fire would be lower compared to the previous week, suggesting a reduction in slaughter capacity post fire. Estimates indicating additional Saturday shifts for August 17 were not available until the afternoon of Friday, August 16.

Actual slaughter numbers collected by USDA's Food Safety Inspection Service were not available until August 29, but largely confirmed Market News estimates from the first post-fire week. The significant Saturday production—an increase of about 21,000 head— made up some of the actual weekday loss in slaughter, resulting in actual total steer and heifer slaughter numbers being only 1,000 head lower than week leading up to the fire.

Despite the loss of the Holcomb plant, the total number of fed cattle harvested during the first three post-fire weeks actually outpaced that of the three weeks prior to the fire by approximately 5,000 head. This should not be unexpected as rising boxed beef prices and the higher price spread provided an incentive to packers to increase production. In the weeks after the fire, Tyson appears to have shipped a significant portion of the cattle it would have previously processed at the Holcomb plant to its other plants.

### *Impact on Price*

In the weeks before Labor Day, retailers typically have their featuring plans and circulars in place targeting anticipated holiday beef demand. During this time, they move to purchase sufficient product to cover their planned holiday promotions. This process was already underway when the fire occurred. Immediately after the fire, beef buyers moved aggressively to procure sufficient product to fulfill their supply needs as the initial information available to market participants indicated the supply of boxed beef may decrease. During the first two weeks post-fire, boxed beef prices trended significantly higher before slowing as needs were covered and a clearer understanding of the plant's closure on the marketplace was gained.

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[3] Sourced from the Estimated Daily Livestock Slaughter Under Federal Inspection report.

Of note, a comparison of advertised prices for beef by major supermarket chains to consumers for Labor Day 2019 indicates virtually no change from similar ad pricing in 2018. As Labor Day passed, beef demand slowed, and the impacts of the beef supply shock dissipated. With additional market information and increased slaughter, the Choice boxed beef cutout value declined steadily. The boxed beef cutout value returned to pre-fire levels toward the end of September but remained above 2016-2018 levels.

The weekly average Choice boxed beef cutout value for the week of the plant fire stood at $216.04/cwt., one percent above the $213.09/cwt. average for the last week of July. During the first post-fire week, the weekly average Choice cutout value rose to $230.43/cwt. a 6.7 percent increase from the previous week. The Choice cutout continued to rise into the second post-fire week, to $239.87/cwt. an 11 percent total increase from the week of the fire. Beginning the third week post-fire, the Choice cutout value began to decline, continuing to a low of $212.58/cwt. in the first week of October, an 11 percent decline from its high during the second week post-fire (Figure 2).[4]

Cattle futures trading on the Chicago Mercantile Exchange (CME) is widely followed by cattle market participants as an indicator of future prices for cattle. CME limits the amount that the price of a live cattle futures contract may change in a day. The August live cattle futures contract hit the lower limit of the trading value on the Monday following the fire and again on Tuesday. During the week following the fire, October contracts posted daily declines culminating in a 9 percent decline by week's end. Through the remainder of August, October contracts were lower than August contracts suggesting that the futures market expected prices to be lower in October. [5]

The weekly average fed cattle negotiated cash dressed price during the week leading up to the fire was $180/cwt. on a dressed weight basis, one percent below the $181.81/cwt. average for the final week of July. Following the declines in fed cattle futures prices, the price of fed cattle declined 6 percent to $169.81/cwt. during the first post-fire week, but gained just under 2 percent in the second post-fire week to $172.70/cwt. Negotiated fed cattle prices declined to a low point of $159.06/cwt. for the week ending September 14 (Figure 1).[6]

During the week leading up to the fire, 74,000 head of fed cattle were traded on a negotiated cash basis.[7] The first week following the fire, only 53,750 head were traded on a negotiated basis, a 27 percent decrease from the prior week. Some sales during that period shifted to formula trading. In the same week that negotiated sales fell, there was a 15,000-head increase in formula

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[4] Weekly average negotiated Choice boxed beef cutout value on a carcass basis in dollars/cwt. sourced from the National Weekly Boxed Beef Cutout and Boxed Beef Cuts - Negotiated Sales report.

[5] https://www.cmegroup.com/trading/agricultural/livestock/live-cattle.html.

[6] The weekly average negotiated price for steers and heifers on a dressed basis sourced from the National Weekly Direct Slaughter Cattle - Negotiated Purchases report using an average of the dressed basis and live basis prices where the live basis price is converted to a dressed basis by dividing by an average steer/heifer dressing percentage of 63%.

[7] The percentage of weekly purchase types (negotiated cash, formula net, forward contract, and negotiated grid) sourced from the National Weekly Direct Slaughter Cattle - Formulated and Forward Contract – Domestic and the National Weekly Direct Slaughter Cattle - Negotiated Purchases reports.

trading. There was a marked drop in the number and percentage of negotiated cash fed cattle purchases immediately after the fire (Figures 4 and 6).

For the week leading up to the plant fire, the spread between the negotiated dressed fed cattle price and the Choice boxed beef value was $36.03/cwt. In the first week post-fire, with declines in fed cattle prices and sharp increases in Choice boxed beef values, the spread widened 68 percent to $60.62/cwt. The spread continued to widen in the second week after the fire, increasing another 11 percent to reach a high of $67.17/cwt. (Figure 3), which at the time, was the largest spread between the price of fed cattle and the price of boxed beef since the inception of Mandatory Price Reporting in 2001. After the third week post-fire, the spread narrowed to $41.77/cwt., a 38 percent decrease from its post-fire high.

## Summary of Market Impacts of the COVID-19 Pandemic

COVID-19 in the United States has significantly disrupted the markets and processing systems responsible for the production and sale of U.S. beef. By the last week of April, disruptions in beef production peaked when nearly 40 percent of the nation's beef processing capacity was idled due to COVID-19 illnesses among packing plant employees. During this COVID-19 pandemic, the largest difference – or spread – between the Choice boxed beef cutout value and dressed fed cattle prices since the inception of Mandatory Price Reporting in 2001 was recorded at just over $279/cwt.

This report summarizes market conditions before and during the pandemic and its impacts on fed cattle prices and boxed beef values, utilizing data covering the period January 1 through June 6, 2020. Key observations from this analysis include:

1. The market reactions to the pandemic during the month of March were characterized by sudden changes in beef demand. Consumers increased purchases of fresh beef at grocery stores, and food service demand declined as restaurants ceased on-site dining.

2. Boxed beef cutout values increased and fed cattle prices were volatile in March as packers operated near full capacity. From the middle of March to early April, the spread between boxed beef values and fed cattle prices increased from $34/cwt. to $66/cwt. The spread averaged just under $21/cwt. during 2016-2018.

3. During April and May, there were significant beef supply disruptions as large numbers of plant workers contracted COVID-19. Plant closures and slowdowns negatively impacted beef production and packer demand for fed cattle. This reduced demand for cattle may have contributed to lower fed cattle prices.

4. An additional surge in consumer retail demand occurred in April when consumers appeared to react to the possibility of beef shortages in grocery stores. The supply disruptions and additional surge in demand may have contributed to a sharp increase in beef values. At the same time, packers purchased fewer cattle as plant closures and slowdowns increased. From early April until the second week of May, the spread grew from $66/cwt. to over $279/cwt., a 323 percent increase.

5. In May, restaurants and other sections of the economy gradually reopened and beef demand began to move back towards a more normal mix between food service and retail grocery demand. May also saw an easing in plant closures and slowdowns. Boxed beef cutout values peaked in the second week of May at $459/cwt. but declined to $298/cwt. by the first week of June. Fed cattle prices rose from a 2020 low of $154/cwt. in late April to $179/cwt. during the first week of June. The spread narrowed from $279/cwt. in the middle of May to $119/cwt. by the beginning of June. It is too early to determine if spread will continue to narrow.

**General Beef Industry Market Conditions Pre-Pandemic**

USDA Market News collects industry data from a number of data sources on boxed beef cutout values, fed cattle prices, and calculates the spread between boxed beef cutout values and fed cattle prices. AMS also collects data on the percentage of fed cattle purchase types and beef production. These data are shown in Figures 1 through 6.

The Tyson Fresh Meats (Tyson) beef packing plant in Holcomb, Kansas resumed processing live cattle in early December 2019 likely alleviating concerns about tight slaughter capacity and allowing for a return to seasonal patterns for cattle prices and boxed beef values in early 2020 (Figures 1 and 2). Live and futures cattle prices remained stable in January before tracking lower into February and mid-March (Figure 1). Beef production outpaced 2019 levels (Figure 5) and boxed beef values moved slightly lower from February into March (Figure 2). The spread between Choice boxed beef cutout values and fed cattle prices was relatively stable and averaged $17.44/cwt. from January until the middle of March (Figure 3).

**Market Reactions**

The World Health Organization declared a COVID-19 pandemic on March 11, 2020, and a state of emergency was declared in the entirety of the U.S. on March 13. Restrictions on travel and social gatherings ensued. Beef production, prices, and the spread were likely impacted by sudden changes in beef demand patterns during the rest of March as consumers increased retail beef demand by apparently stockpiling retail beef, while food service demand declined dramatically as restaurants shifted to take-out and delivery only.

Supply disruptions followed in April and May as large numbers of plant workers became ill from COVID-19 and plants experienced closures and production declines. News of the supply disruptions may have spurred an additional surge in retail beef demand as consumers may have become concerned about beef shortages and again stockpiled beef. Currently, fewer plant closures and less severe slowdowns appear to be easing the supply disruptions. The gradual reopening of restaurants across the U.S. to in-person dining is currently prompting a shift back to food service demand from retail demand.

*Impact on Production, Prices, and Spreads – Changes in Beef Demand (March)*

The sudden changes in beef demand began in the middle of March as public concerns about the pandemic increased and consumers appear to have begun stocking up on retail beef as public health orders closed restaurants to in-person dining. USDA's Economic Research Service (ERS) acquires proprietary retail scanner data from Information Resources, Inc. (IRI), a market research firm. The IRI scanner data show that consumers increased their weekly retail purchases of beef by approximately 66 and 77 percent for the weeks ending March 15 and March 22, respectively, compared to the same weeks in 2019.

Packers met this increased retail demand by increasing processing volumes (Figure 5), including the addition of Saturday shifts. Actual slaughter numbers collected by USDA's Food Safety and Inspection Service and reported by AMS Market News show that actual slaughter during the third week of March was over 660,000 head of cattle, and in the last week of March, actual slaughter exceeded 684,000 head, 3.8 percent and 10.7 percent higher than the same weeks in 2019, respectively. Despite the production increase, shortages of retail beef for sale in grocery stores existed as packers reportedly were not able to shift beef production and packaging quickly from food service to retail grocery products.

The weekly average Choice boxed beef cutout value rose from $207/cwt. in the middle of March to over $255/cwt. at the beginning of April, an increase of approximately 23 percent (Figure 2). Packers increased their beef production by increasing purchases of fed cattle, possibly contributing to an increase in fed cattle prices. From mid-March to early April, dressed fed cattle prices increased from $173/cwt. to $189/cwt., an increase of just over nine percent (Figure 1). Futures prices of fed cattle, however, declined over the same time period. One possible reason for the decline is that the length and severity of the pandemic and the markets' responses to its effects are uncertain, which increases the risk of buying futures contracts. The nearby weekly average futures price was over $109/cwt. for the week ending March 6. By the first week of April, the futures price declined to $95.90/cwt.

Rising boxed beef cutout values and fluctuating fed cattle prices increased the spread during March. From mid-March to the beginning of April, the spread increased by approximately 94 percent, from approximately $34/cwt. to $66/cwt. The spread averaged just under $21/cwt. during 2016-2018 (Figure 3). Beef packers were able to respond to higher spreads by running plants at higher capacities in March. Also, in March, packing plant employees had not yet been severely impacted by COVID-19, a situation that changed in April.

*Impact on Production, Prices, and Spreads – Supply Disruptions (April - May)*

Beginning in late March and early April, a large number of plant workers contracted COVID-19. By mid-April, plant closures and slowdowns from COVID-19 illnesses led to dramatic declines in beef production and fed cattle demand. Plant closures and slowdowns increased through the month and peaked at the end of April. The President invoked the Defense Production Act on April 28 and ordered meat processors to remain open. Plant closures and slowdowns eased throughout May.

During the last full week of March, beef production was 68 million pounds higher than the same week in 2019, but was 180 million pounds lower than the same week in 2019 by the last week of April, a year-over-year decrease of 34 percent (Figure 5).[8] Actual slaughter data collected by

[8] Sourced from the Weekly Actual Slaughter Under Federal Inspection report.

USDA's Food Safety and Inspection Service and reported by AMS Market News show that weekly slaughter decreased from over 684,000 head at the end of March to under 439,000 at the end of April, a decrease of 36 percent.

An additional surge in retail beef demand occurred in April when consumers appeared to react to the possibility of beef shortages in grocery stores. IRI scanner data show that consumers increased their retail purchases of beef from the corresponding weeks during 2019 by approximately 29 percent and 44 percent for the weeks ending April 19 and April 26, respectively. Grocery stores responded to shortages by rationing sales and cutting promotions.

The beef supply disruption and the additional beef demand surge contributed to further increases in boxed beef values. The weekly average Choice boxed beef cutout value rose from approximately $255/cwt. at the beginning of April to over $459/cwt. by the second week of May, an increase of approximately 80 percent (Figure 2).

After the plant closures and slowdowns, packers purchased fewer fed cattle, which likely contributed to decreased fed cattle prices. From the beginning of April until the beginning of May, dressed fed cattle prices decreased from $189/cwt. to $154/cwt., a decrease of over 18 percent (Figure 1) and a low price so far for 2020. As packer purchases of fed cattle declined, cattle began backing up in feedlots leading to higher carcass weights. The carcass weights of all grades of steers and heifers reported by AMS Market News showed that carcass weights averaged 914 pounds in the first week of April, peaked at 952 pounds in the third week of April, and declined to just above 900 pounds in late April into May. This is well above 2019 levels, which averaged 878 pounds in April.

The May USDA *Cattle on Feed* report shows that April marketings of fed cattle to packers were down 24.3 percent from 2019. This follows a 13.1 percent increase in March from 2019 as reported in the March USDA *Cattle on Feed* report. Feedlot placements by producers and feeders were 22 percent lower in April than in 2019.

The apparent changes in supply and demand in April and May occurred as the spread reached record highs. From the beginning of April until the third week of May, the spread rose from approximately $66/cwt. to just over $279/cwt., an increase of approximately 323 percent (Figure 3) and the largest spread between the price of fed cattle and the price of boxed beef since the inception of Mandatory Price Reporting in 2001.

*Impact on Production, Prices, and Spreads – Gradual Reopening of the Economy*

By the end of May, all 50 states were in some phase of reopening their economies, including restaurants to in-person dining. The gradual reopening of the economy, restaurants in particular, shows a trend for beef demand moving back towards a more normal mix between food service and retail grocery demand. The gradual reopening of the economy also occurred during a period of increased operating capacity due to reductions in plant closures and slowdowns. The plant disruptions peaked at the end of April and decreased throughout May.

In the second full week of May, boxed beef cutout values peaked at approximately $459/cwt. but declined to $298/cwt. by the first week of June (Figure 2). Dressed fed cattle prices increased from approximately $154/cwt., during the last of week of April to $179/cwt. in the first week of June, an increase of approximately 16 percent (Figure 1). The increase in fed cattle prices occurred at the same time as the recovery in the nearby cattle futures from $86.64/cwt. during the last week of April to $100.35/cwt. during the last week of May before declining again to $95.74 the first week of June.

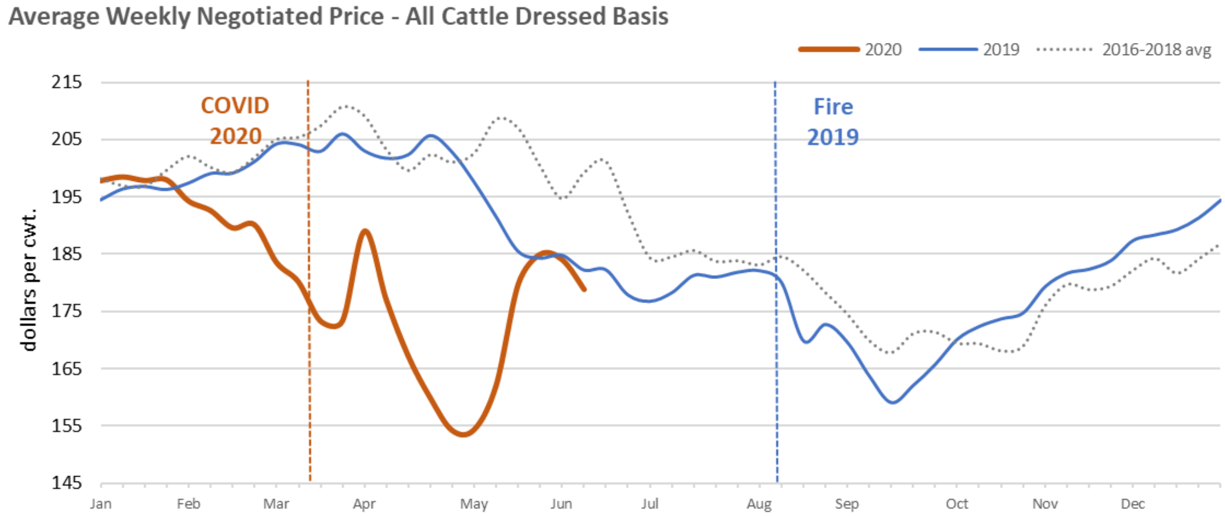
As beef values declined and fed cattle prices increased, the spread has narrowed. During the Afirst week of June, the spread narrowed to approximately $119/cwt., down from approximately $279/cwt. during the first and second weeks of May (Figure 3). This is a decrease of approximately 57 percent, but the spread is still high by historical standards. It is too early to determine if this trend will continue as uncertainty persists over the recovery of the supply situation at beef plants and the recovery of food service demand amid continued COVID-19 concerns and any continued effects.

## Continued Vigilance

Findings thus far do not preclude the possibility that individual entities or groups of entities violated the Packers and Stockyards Act during the aftermath of the Tyson Holcomb fire and the COVID-19 pandemic. The investigation into potential violations under the Packers and Stockyards Act is continuing.

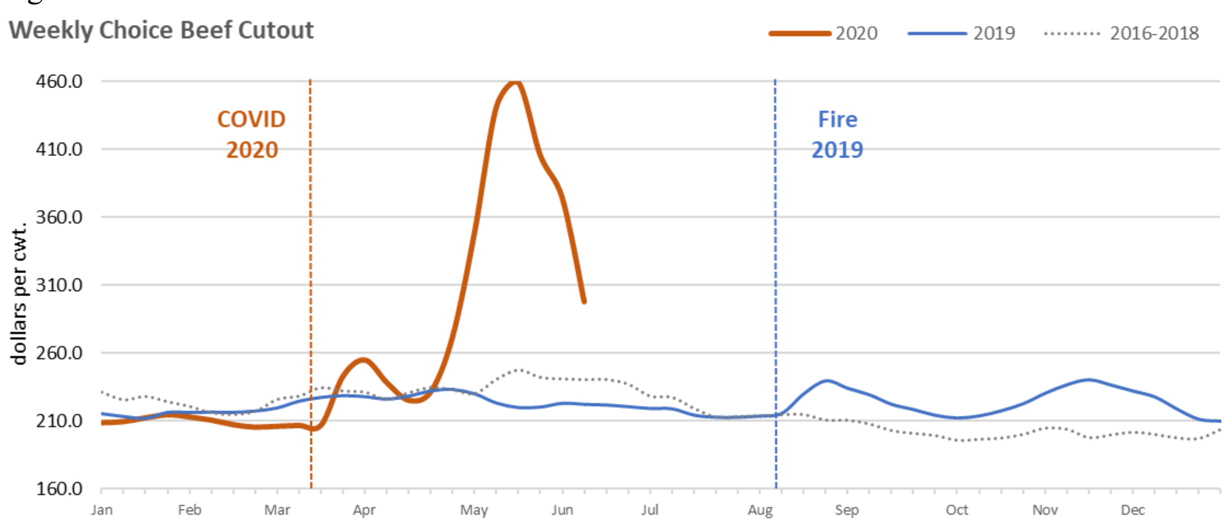
USDA does not solely own investigatory authority over anticompetitive practices in the meat packing industry and has been engaged in discussions with the Department of Justice (DOJ) regarding allegations of anticompetitive practices in the meat packing industry. Should USDA find a violation of the Packers and Stockyards Act, it is authorized to report the violation to DOJ for prosecution.

Figure 1.



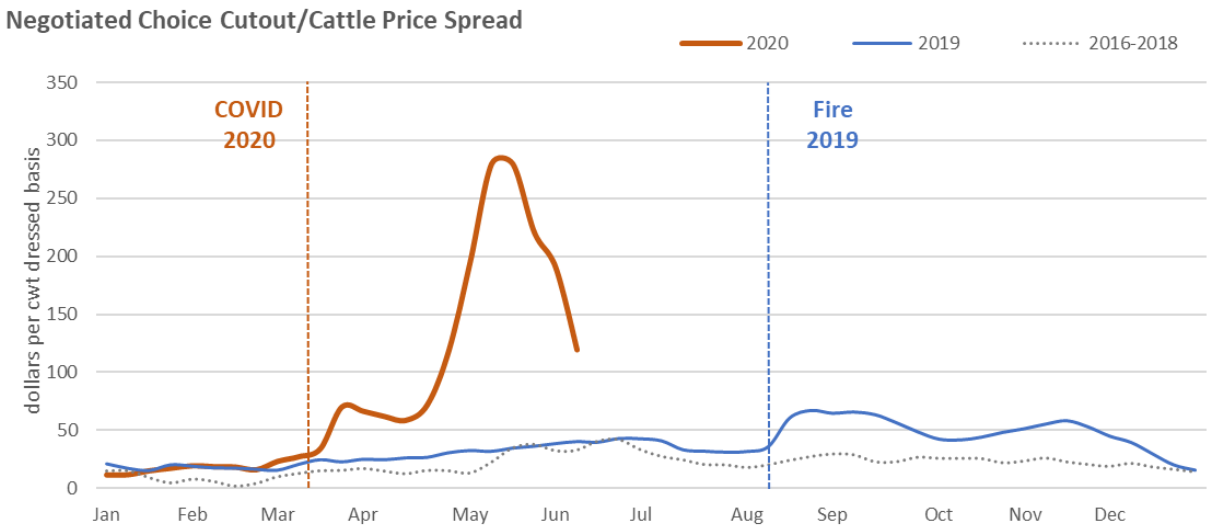

Weekly average negotiated cash basis prices for all cattle on a dressed basis in dollars per cwt. comparing 2020 to 2019 and to the 2016-2018 average. Source: USDA Agricultural Marketing Service

Figure 2.



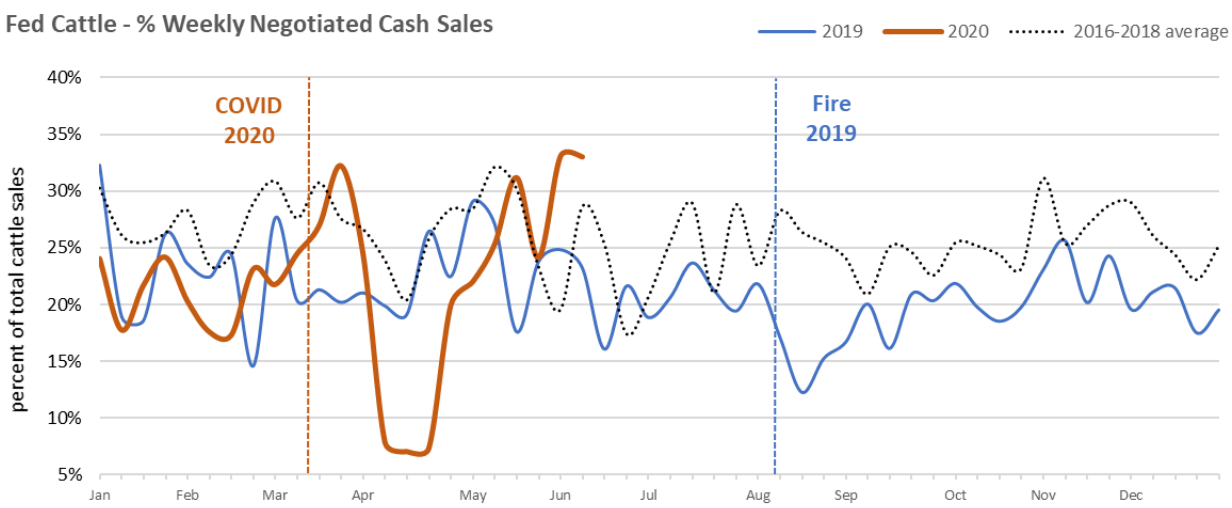

Weekly average negotiated Choice boxed beef cutout value on a carcass basis in dollars per cwt. comparing 2020 to 2019 and to the 2016-2018 average. Source: USDA Agricultural Marketing Service

Figure 3.




The dollar difference between the weekly average negotiated dressed basis Choice boxed beef cutout value and the weekly average negotiated dressed basis price for live fed cattle. Source: USDA Agricultural Marketing Service

Figure 4.




Weekly average percentage of negotiated fed cattle cash sales of total fed cattle sales comparing 2020 to 2019 and to the 2016-2018 average and highlighting the immediate post-plant closure period. Source: USDA Agricultural Marketing Service

Figure 5.

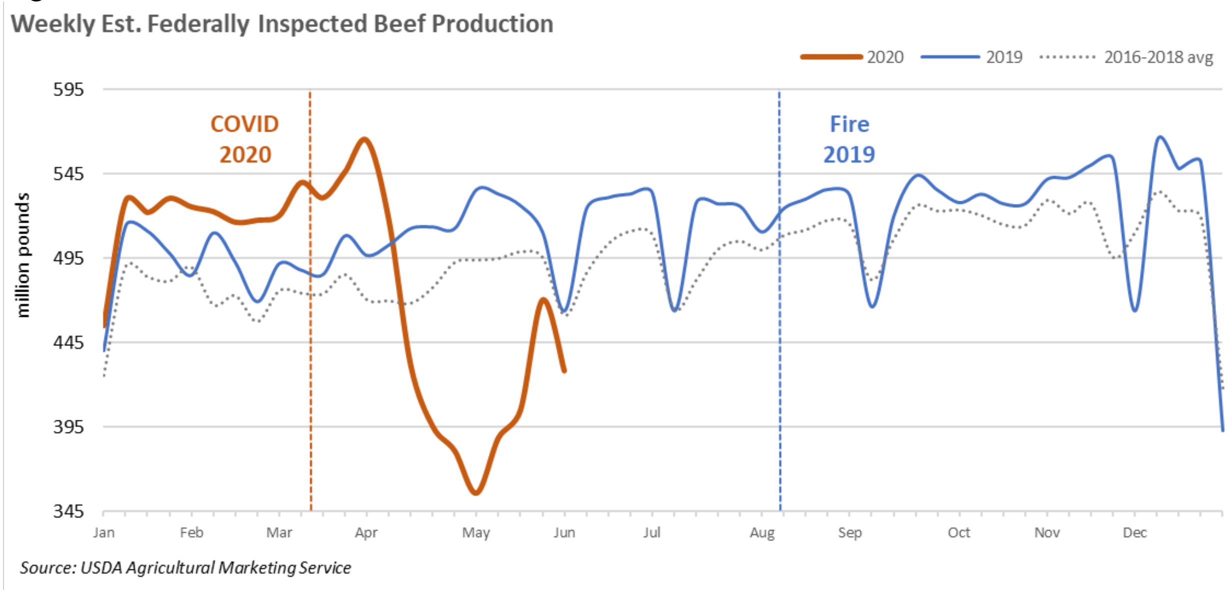
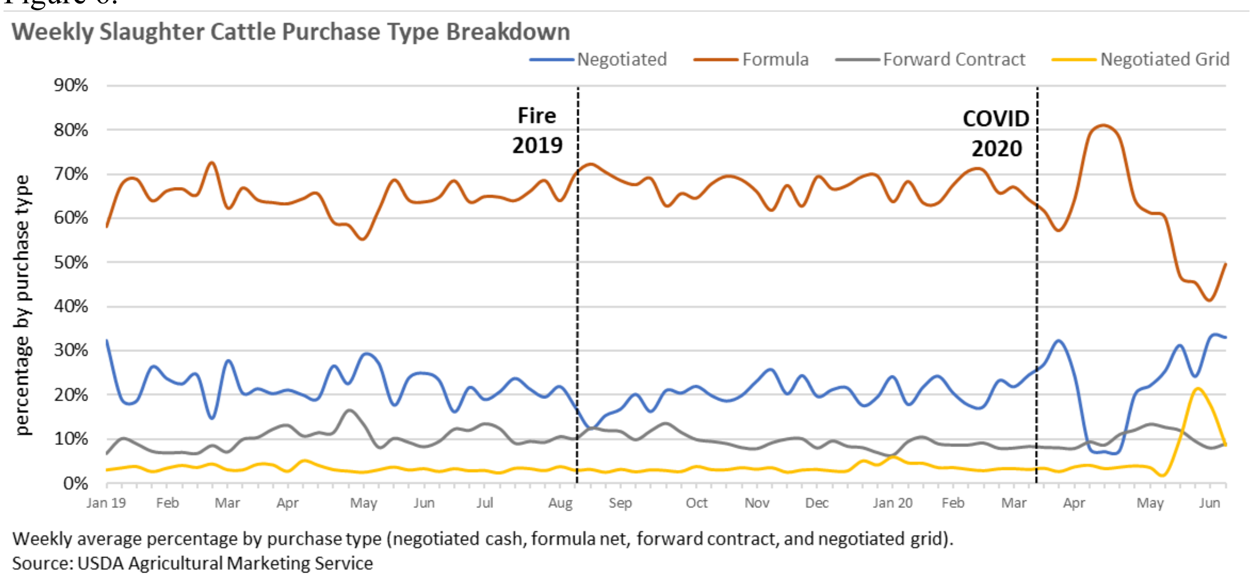



Figure 6.



## Other Considerations

The preceding summary of market conditions is only one component of a larger discussion within the cattle, beef, and related industries that share a common narrative about a highly concentrated meatpacking sector. At the core of many of these discussions is the desire by many market participants for improved price discovery, reinvigorated competition, and a more transparent relationship between the prices for live cattle and the resulting products.

### Price Reporting and Transparency

USDA's Agricultural Marketing Service (AMS) strives to alleviate conjecture in the marketplace through its various market reporting programs, including Livestock Mandatory Reporting (LMR). LMR, in operation for nearly two decades, disseminates timely market information to the public at no cost to its users. As LMR has become a key source of information for many contracts and marketing agreements, it is incumbent upon AMS to further leverage that authority to assist in the marketing of America's cattle and beef – especially in ensuring an even playing field for all participants regardless of size or resource.

One of the underlying concerns about price discovery is the declining number of participants in the negotiated cash market. As the number of participants has diminished, confidentiality guidelines have resulted in periods when prices cannot be reported in certain regions (e.g. Colorado), leading to concerns about price transparency. Last year, AMS commissioned economists at Kansas State and Iowa State Universities to evaluate the current 5-Area Cattle Reporting regions. Their findings pinpointed several ways to reduce the incidence of non-reporting in LMR due to an inability to meet confidentiality guidelines (See Appendix). A reduction in non-reporting will provide improved price discovery. Most notably, a combination or reshuffling of reporting regions – a change that could be made without legislative action – could ultimately expand the market data released to the public. However, there has not been industry consensus on such a recommendation to date.

On a daily and weekly basis, AMS disseminates estimated and actual slaughter information. through the Estimated Daily Livestock Slaughter, and the Actual Weekly Livestock Slaughter, under Federal Inspection reports—giving the industry valued information on supply and volume. With a majority of packers covered by AMS through LMR, the accuracy of the estimated data report is high, usually under a 0.5% differential. The Actual Slaughter Under Federal Inspection report is released two weeks after the estimated totals allowing time for FSIS data collection and consolidation. Given the long history of the accuracy of the daily slaughter estimates, USDA is exploring the idea of no longer referring to the daily report as an "estimate" to encourage the market's immediate use of the information. The daily report would still be followed up with the confirmatory report using FSIS data and would continue to include the highly sought-after information in the current report regarding actual weights for cattle, steers, and heifers.

AMS has also explored a 14-day slaughter scheduled delivery submission requirement through LMR, a precedent currently in place for daily LMR swine reporting. An LMR cattle submission form change would be required, to allow the capture of the slaughter schedule. Under this scenario, beef packers could report daily the number of cattle scheduled to be delivered for slaughter each day for the next 14 calendar days. A 14-day cattle slaughter schedule exhibits two informative advantages over the current slaughter reports: (1) the data is available several hours earlier each day, and (2) scheduled delivery figures are provided for well beyond just the current slaughter day.

In light of steadily decreasing percentages of negotiated sales and continued market volatility, USDA is also aware of a variety of proposals by external stakeholders that would require packers to meet a minimum threshold of purchases via negotiated cash trade. Likewise, USDA is aware of the variety of concerns with these proposals and potential unintended consequences throughout the industry, especially if regional considerations are not adequately considered.

Such regional disparities might be addressed in part by tying the minimum purchase thresholds to regional reporting abilities. Under this approach, if an LMR region began to fail to meet confidentiality guidelines due to packers not procuring cattle on a negotiated cash basis, with the proper legislative authority, AMS could track and inform packers of the requirement to make an additional percentage of such purchases in the following week to allow for reporting. This would not place further reporting burden on packers as AMS Market News already receives data from beef packers on both a company and plant basis, broken down by purchase type, including negotiated cash sales. Computer programming could be implemented to more readily track negotiated cash sales as a percentage of company or plant purchases. If Congress did provide this additional authority, careful consideration must be given to the time period in which the purchase requirement would apply.

In an effort to promote price transparency, private and industry groups have long worked to develop an online platform to encourage the negotiated marketing of fed cattle. However, the platform has struggled to attain significant packer participation. Exercise of the new authorities contemplated above could support the effort by driving increased participation.

Beyond the scope of LMR, the concept of creating and compensating a pool of negotiated cash market traders has been explored by some in academia and industry. With further development and discussion, the idea may prove an innovative and flexible approach to solving the public good problem of a lack of reliable price discovery.

## Risk Management Solutions

Small and medium-sized producers could better position themselves to more effectively negotiate sales with packers and compete with large producers if they had better access to risk management training. For example, cattle feeders that hedged (sold a futures contract) when they placed cattle on feed prior to the pandemic were able to mitigate the steep decline in live cattle prices after the pandemic by closing their hedge (buying a futures contract at a lower price) at a profit. Small and medium-sized producers could also benefit from products tailored specifically for operations of their size. USDA, the Commodity Futures Trading Commission (CFTC), the Chicago Mercantile Exchange (CME), and relevant producer groups could partner to offer outreach and education opportunities and could also explore the alteration of existing futures contracts and the development of new contracts or derivatives specifically designed to level the playing field between large producers—who have greater access to information and capital—

and small and medium-sized producers. A straightforward example is reducing the number of pounds per CME feeder and live cattle contract, currently at 50,000 and 40,000 respectively, to a lower number of pounds to give small and medium-sized producers additional flexibility in managing their risk through hedging strategies. New products like a boxed beef contract could also be considered that place commercial participants' interests in a more balanced position with those of speculators and managed money.

Additionally, USDA's Risk Management Agency (RMA) currently offers plans to protect against gross margin losses for fed cattle (Livestock Gross Margin) and price declines for feeder and fed cattle (Livestock Risk Protection). The Federal Crop Insurance Corporation Board of Directors (Board) recently approved changes for both of these products to make them more affordable and accessible to producers. Improved risk management products could allow small and medium-sized producers to compete more effectively with large producers and weather market disruptions caused by events such as COVD-19 that have a disproportionate impact on small and medium-sized producers.

**Small Processor and Cooperative Opportunities**

USDA further recognizes there are many discussions about reducing the burden for smaller meat processors, asserting that the high cost of compliance with Federal requirements are barriers to entry and/or survival. USDA's utmost goal through the Food Safety and Inspection Service's work is to protect food safety, and as a result, the agency has dedicated significant resources to outreach, education and technical assistance for these small businesses. Additionally, pursuant the 2018 Farm Bill, the Food Safety and Inspection Service is working with a third-party to review and improve upon the effectiveness of the agency's guidance and outreach to small and very small meat processors.

The current pandemic has also created a resurgence in demand for services provided by these small and very small processors, and for consumers who are interested in buying their meat more directly from the farm and ranch where it was raised. We understand the addition of direct-to-consumer options for beef producers, small processors, retailers, and others must be done in a way that does not compromise federal food safety standards or create disruption with our trading partners. USDA is committed to working with stakeholders to balance food safety with these growing consumer preferences and growing e-commerce platforms.

While USDA's Rural Development (RD) programs does not offer a loan or grant program specific to meat processors, a number of loan guarantee and grant programs administered by RD can provide assistance to small and very small meat processors looking to develop or expand their business. RD loan guarantees can be used by individuals, businesses, or cooperatives for: acquisition, conversion, enlargement, repair, modernization, development, purchase of equipment, leasehold improvements, machinery, supplies, or inventory.

The cooperative model (co-op) has long been an option for producer collaboration to enhance marketing power. Small scale application of the co-op model has also proven successful in providing small producers access to processing services in limited instances. However, large scale co-op meat processing facilities have historically struggled to reach sustainable levels of profitability. USDA's Rural Cooperative Development Grant funds centers for co-op development across the country that can offer technical assistance in organizing and forming a co-op. USDA also maintains a library of educational resources on a wide range of co-op operation topics.

## P&S Act Updates and Enforcement

In January, USDA issued a proposed rule to establish criteria the Secretary would consider when determining whether an undue or unreasonable preference or advantage has occurred in violation of the Packers and Stockyards Act (P&S Act). The proposed rule acknowledged current court precedent regarding the consideration of harm to competition when determining if a preference or advantage violates the Act, but also provided the Secretary four criteria for careful consideration and the option to consider additional factors as warranted. USDA is currently reviewing the 2,351 comments received in response to the proposal as it works to finalize the rule.

Beyond rulemaking, small and medium-sized producers could also benefit from updates to the P&S Act designed to offset the impacts of operating in a concentrated industry, where the market power resides with large meatpackers. Smaller producers often find themselves to be price takers in the market for fed cattle and lack the volume of larger producers to negotiate unique and advantageous marketing agreements with large meatpackers.

In efforts to address this imbalance, there has been discussion of creating a beef contract library similar to the swine contract library USDA currently maintains pursuant to Section 222 of the P&S Act. Amending the P&S Act to develop a similar library for beef transactions could help increase price discovery in cattle markets and enhance access to market information for all market participants, regardless of size.

Interested stakeholders and legislators may also consider targeted amendments to the P&S Act that would provide USDA with investigative and enforcement tools on par with those of our Federal partners. For example, the ability to issue Civil Investigative Demands ("CIDs") with respect to unfair or deceptive acts or practices would bring USDA's authorities in line with those of the Federal Trade Commission (FTC) and DOJ. While subpoenas are useful, the additional authority to require written reports and answers to questions could be very beneficial in certain investigations. Amendments to elevate certain packer conduct to criminal violations and provide the Secretary with the tools necessary to carry out appropriate criminal investigations may also be ripe for consideration.

## Conclusion

It is important that any proposals aimed at addressing these complex issues and others associated with the market disruptions caused by the Holcomb fire and COVID-19 receive careful consideration and thorough vetting given their potential to affect everyone whose livelihood depends on the sale of cattle, beef, or related products. USDA stands ready to assist stakeholders and policymakers as they continue to explore options to improve price discovery, level the playing field between producers and large meatpackers in negotiating prices and procurement methods, and to foster a more transparent relationship between the prices for live cattle and the resulting products.

## Appendix: Price Discovery through Livestock Mandatory Reporting

Price discovery in the cattle markets has been a major concern for decades and a driving force behind the enactment of The Livestock Mandatory Reporting Act of 1999. Livestock Mandatory Reporting (LMR) applies to slaughter cattle, swine, sheep, boxed beef, lamb meat, and wholesale pork. LMR was implemented in 2001, reauthorized in 2006, 2010, and 2015. Currently, LMR is set to expire September 30, 2020.

### Who and what is subject to Livestock Mandatory Reporting?

For cattle reporting, federally inspected packing plants that annually slaughter or process an average of 125,000 cattle are required to report information. Packers must report information of all transactions involving the purchases of slaughter cattle. Data on the prices and quantities of livestock and livestock products are reported on a daily and weekly basis. The cattle transaction types include:

- Negotiated purchase (spot market purchase): A price is determined through buyer and seller interaction, and the cattle are scheduled for delivery within 30 days of the agreement.
- Forward Contract purchase: An agreed upon price is scheduled ahead of slaughter, and a base price is tied to price quotes in the futures market.
- Negotiated Grid purchase: A base price is determined through buyer and seller interaction within 14 days of delivery, but the final net price includes premiums and discounts.
- Formula purchase: An advanced agreement of cattle delivery that does not utilize the purchase methods above.
- Packer-owned: Owned by the packer for more than 14 days.

Cattle data are aggregated to the national level as well as several regions: Texas-Oklahoma-New Mexico, Kansas, Nebraska, Colorado, Iowa-Minnesota, and 5-Area (composed of the five regions included in this list).

### When is data excluded from reporting?

Data may not be published due to confidentiality issues. To publish an LMR report, the data must meet the 3/70/20 confidentiality guideline, which requires the following:

- At least three reporting entities need to provide data at least 50 percent of the time over the most recent 60-day time period.
- No single reporting entity may provide more than 70 percent of the data for a report over the most recent 60-day time period.
- No single reporting entity may be the sole reporting entity for an individual report more than 20 percent of the time over most recent 60-day time period.

Additionally, for daily purchases of slaughter steers and heifers, transaction lots with 10 head or less are excluded.

## What is Livestock Mandatory Reporting's Impact on Price Discovery?

Several studies have taken place since the inception of LMR, evaluating its impact on livestock markets. A 2015 study by Matthews and colleagues analyzed the discovery of livestock market prices. The study concluded that LMR increased the flow of market information, leading to better informed markets. Boyer and Brorsen (2013) studied the impact of LMR on beef markets and concluded that if price uncertainty is reduced for packers, then cattle feeders benefit from increased competition by the packers. An earlier work of Azzam (2003) reported that LMR could assist with increasing competitiveness in livestock marketings. Lastly, the 2018 Report to Congress on Livestock Mandatory Reporting found that during the October 2013 Government Shutdown, livestock markets were deeply affected by the lack of LMR. For example, the CME Group suspended its feeder cattle index, and private sector economic analysis was stifled due to the lack of LMR during the shutdown (Agricultural Marketing Service, 2018).

## Appendix References


Azzam, A. 2003. "Market Transparency and Market Structure: The Livestock Mandatory Reporting Act of 1999." American Journal of Agricultural Economics 85(2): 387-395.

Agricultural Marketing Service, United States Department of Agriculture. 2018. Report to Congress: Livestock Mandatory Reporting

Boyer, C.N. and B.W. Brorsen. 2013. "Changes in Beef Packers' Market Power after the Livestock Mandatory Price Reporting Act: An Agent-based Auction." American Journal of Agricultural Economics 95: 859-876

Mathews, Kenneth H, Jr., W. Brorsen, W.F. Hahn, C. Arnade, and E. Dohlman. September 2015. Mandatory Price Reporting, Market Efficiency, and Price Discovery in Livestock Markets. LDPM-25401, U.S. Department of Agriculture, Economic Research Service