

Thin Fed Cattle Markets: Interview Results – Executive Summary

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Fed cattle markets are thinning. There are a smaller number of transactions and volume of animals traded in the negotiated cash market. By definition, there is more use of alternatives to the cash market. And as a consequence, there is less price discovery work being performed in cash fed cattle markets. What's the negotiated cash market worth – in terms of opportunity for use and information provided? Further, what are the marketing practices of cattle feeding enterprises and how will these practices change in the future? (This is the first of three executive summaries from the Thin Fed Cattle Markets project. The second discusses policy prescriptions and third is research results on how-thin-is-too-thin?)

Individuals that represent cattle feeding businesses and beef packing businesses were interviewed. Cattle feeding businesses marketed animals through the cash market and alternatives to the cash market. Beef packers were involved with management and procurement. An essential and main question underlying details of the interviews was what is the value of the cash market? And what is that value relative to the value of alternatives to the cash market? The main finding is that alternatives to the cash market are substantially more valuable than the cash market.

Formula operations achieved efficiency and value from formula arrangements relative to using the cash market. These operations could routinely construct \$25 per head values associated with formula marketing. Animals and pens were more efficiently managed while on feed. Business operations were more efficient with less overhead. Throughput of animals – percent capacity utilization – was higher. Animals and pens were paid more premiums and fewer discounts associated with carcass characteristics. Costs were lower and revenues were higher. Businesses that made substantial use of cash markets disbelieved this evidence. And well-run cash operations could have similar efficiencies, animal valuations, and overhead but the complete system was less formal and complete in a business model.

Formula operations communicated a necessity to move away from cash market use. Participating in the cash market disrupted operations. Cash market information was often important but participating in that market was a detriment to the business and the cash market information value was substantially less than the value of the formula. No formula operation expressed any interest in returning to the cash market or in marketing any animals through cash markets. The cash market had value in terms of price information but not in terms of opportunity. Within cash operations interviewed, individuals communicated a skill set, interest, and a strong perceived need for continuing to participate in the cash market. These business models, the individuals that create them and are attracted to them, are different from formula operations. Cash operations believed the work they did negotiating price had value – further, these operations expressed dissatisfaction with doing the price discovery work that the formulas then used. They clearly understood they were the residual market, there were fewer in this slice of the market doing the work, and were dissatisfied.

The other type of business model interviewed that made minimal use of the cash market was those that extensively forward contracted. There are a substantial number of these operations. The forward contracting here is not hedging with futures and options. Price risk management was integral parts of all feeding organizations. The only operations that did not communicate this were significantly diversified with farming and crop enterprises. Forward contracting operations were integrating upstream to feeder animal and calf suppliers, were sourcing cattle early, and had well-coordinated systems for sourcing based on pricing opportunities. (Some formula operations did this as well.) Similar to formulas, forward contracting was indispensable to the business and more valuable than the cash market. Again, cash market information was important but risk management was essential to the firm. Forward contracting operations tended to have younger independent owners, more borrowed money, and less investment capital.

Sourcing decisions for both forward contracting and formula operations were coordinated with growing operations both within the cattle feeding firm and with contractors providing growing services. Noncash market organizations appeared

to be integrating upstream to secure supplies as animals and forage resources were available. There is less integration downstream between cattle feeding and meatpacking operations – formal integration and not just separate cattle feeding and meatpacking profit centers owned by a parent company. However, there is some formal integration and some innovative relationships. The valuing of most transactions between cattle feeders and meatpackers are based on price and in terms of live or carcass weight. With valuation based on price, profits of the cattle feeding and meatpacking businesses are not combined. Price creates separation. Some formally integrated operations valued based on price. Others valued based on proportional ownership of animals. In these quantity-shared relationships, feeding organizations produced animals that make the packer money as well as the feedlot. And packers ran operations to make the feedlot money as well as the packer. These quantity-shares do not require fed cattle price information – only wholesale beef price information. These also require substantial communication of financial information and trust not needed in arm's length price transactions. These quantity-share arrangements are present but not prevalent.

Interviewees were asked if fed cattle markets were too thin: what portion of cash trade is too thin? And too thin implied the formula operation would not use the price from that market or the cash operation would discount the usefulness of the price information. There were marked differences between businesses that use the cash market and those that used alternatives. Cash market traders wanted to see 30-50% of trade in a regional market as cash trade. Formula operations were less concerned about thinning cash trade (10% was acceptable) as long as the resulting prices in the thin region mirrored prices in other regions. Forward contracting operations viewed themselves as not contributing to the thin markets problem. Clearly with the non-cash operations, the focus of concern is on information revealed by price and not the price discovery process. Price discovery implies changing prices to reflect changing market conditions. There was little recognition of this function – as long as prices were not out of line with other markets then there was no problem. This is a striking finding: an understanding of price discovery is not thoroughly common.

With the cash trade in Texas-OK-NM effectively going to zero in late 2014, formula operations in those areas and packers procuring through formulas were asked how they changed the pricing of those arrangements and what they would consider in the future. There were volume contingencies for the price used in every formula. There were volume minimums requiring additional communication and possibly the price used would change. Different neighboring USDA AMS regions were used instead or to form an average. The USDA 5-Area weighted average price was also used in raw form and with adjustments based on history to the thin region. A surprising result was the willingness to transition to futures contract based pricing or basis pricing of formulas. Basis was also used for cash trades. Cash trades are trades today for delivery within 14 days – two business weeks or agreeing to a trade this week for delivery this week or next. Historically, basis trades are forward contracts that are deliverable beyond the 14 day window and priced prior to the futures contract entering the delivery month. Futures contract prices and averages of prior days were being considered for formulas. Futures based basis pricing were also used for cash trades. And basis trades that were hedged by the cattle feeder were often converted to a hedged position for the packer buyer.

Thin markets price discovery research makes use of two parameters which are assumed in past applied work. The method is based on a statistical inequality that communicates a sample size (number of transactions) needed to assess a population parameter relative to a sample statistic (this is a sampling error) with a certain probability. The unknown parameters are the sampling error and the probability. Questioning interviewees about these two assumed parameters was a difficult exercise. The questions are almost unanswerable even for very interested and very informed participants. Prior research uses \$1/cwt or less and 95-99% of the time. These numbers are too small for those interviewees willing to continue the discussion. The \$1/cwt error was the lowest figure suggested and 75-80% of the time was the lowest probability. These parameters imply that industry member's working knowledge of markets say that effective price discovery can happen with historically small cash trade before it is a problem. The bigger issue was the longer term persistence of the problem and the impact on business profitability. No interviewee was concerned that thin markets had negatively impacted business profitability over a significant time period. If that was the case then they would act. I

followed up with, “What would you do?” Frequently, that question was then posed to the interviewer. In short, the industry is aware of the issue, concerned that it may be a problem, and is to be open to prescriptions for industry action.

The conclusions above give a hint as to the direction the discussions went regarding, “What to do about it?” There was an interest in almost any means of addressing the thin markets issue. However, there were no specific actions being taken. Actions that might impact price discovery, price information, and price reporting being considered by businesses interviewed were all in the best interests of those doing them and minor consideration was given to the impact on the marketplace.

Interviews progressed through the acceptability of the proposed policy prescriptions – summarized in the second executive summary. There were interests in participating in industry discussion, there were interests in electronic trading, there were interests in using marketing firms, and there were even interests in compensating price discovery providers. But there was nothing being done to specifically address the thin markets problem. There were vertical integration arrangements that eliminated the need for a cattle price. But vertical integration was done for business reasons and not due to fed cattle pricing concerns. Again, reasons were internal and not due to problems valuing fed cattle.

All was not blue sky, as there was zero interest in one prescription and that was government intervention and legislation. There were no technical fixes being used. There were those that were concerned for price discovery, and especially in the southern plains, but there were no actions to specifically improve it. There was interest in electronic markets but classic first-mover concerns: they would want to see it work before they joined. It was well-recognized that, unlike financial services, overcoming transactions – primarily transportation – costs associated with trading cash fed cattle would be a problem for development of new or electronic markets. Many individuals talked about the need for trust and that there are high transactions costs in trading cattle – there are things that can impact the profitability of a transaction that may not be easily measured beforehand. Many other individuals talked that this was not an issue in that they had extensive databases of animal performance and profitability and that they established trust based on long proven histories. There was continued interest in using market makers such as those commission based firms that trade cattle for members. There was no clear interest in developing new information that may reveal what their business was doing or that could be used by the packing industry.

I do not believe volume will return to cash markets outside of industry direction or action. There are strong incentives for individuals to market fed cattle through methods other than negotiated cash trade. Interviews revealed the value of alternatives to the cash market. Formulas and forward contracts are too valuable relative to the value of a thickly traded cash market. For those that use that business model, the overwhelming individual economic incentive is to use formulas and forward contracts more and use the cash market less. The cash market has value – in terms of opportunities and information – but that value is small.

But the value of the cash market is not zero. And price discovery needs to be treated as a public good. Many formulas use information from efforts of those that negotiate cash prices. Likewise, forward contracts require historical information on cash prices to construct basis estimates – or a history of basis bids and basis trades which tend to not be public. However, alternatives to the cash market make use cash market information but do not contribute to its provision. This is the classic public good problem. To protect the commons – the value of the cash market opportunity and its information – the industry must help the remaining cash market work better, offset incentives to not use the cash market, and/or create a market for the price information. These are the policy prescriptions for the industry to consider.