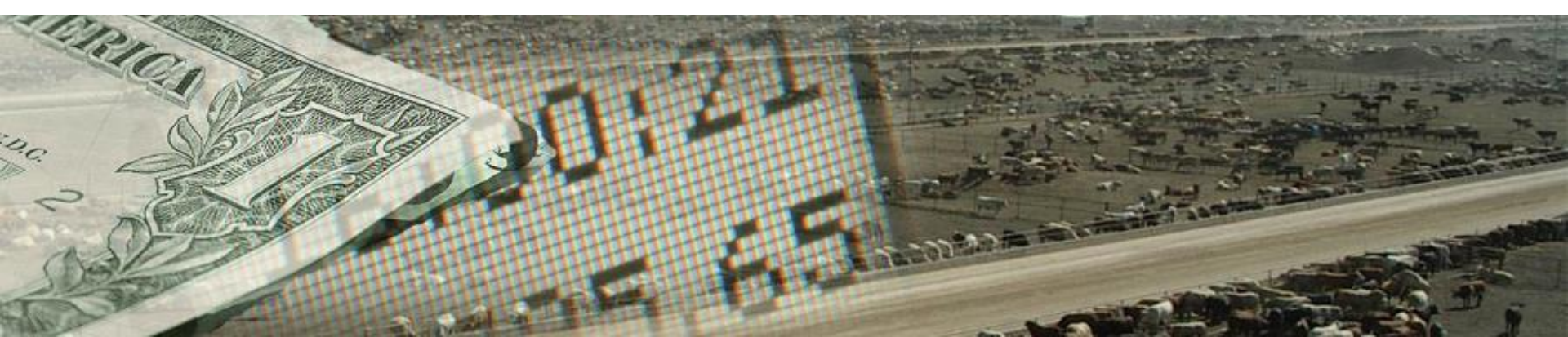
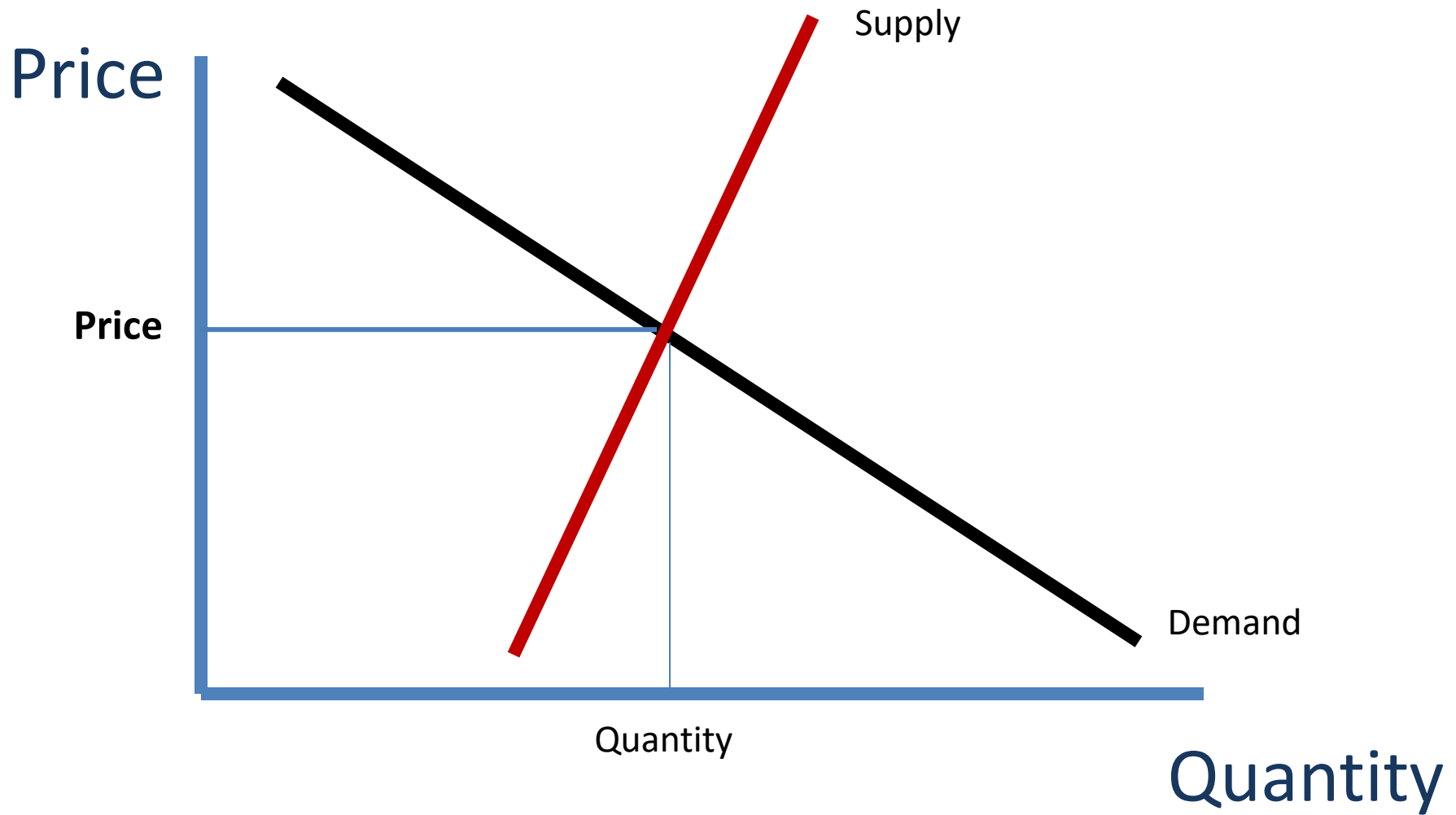


What is Price Discovery?

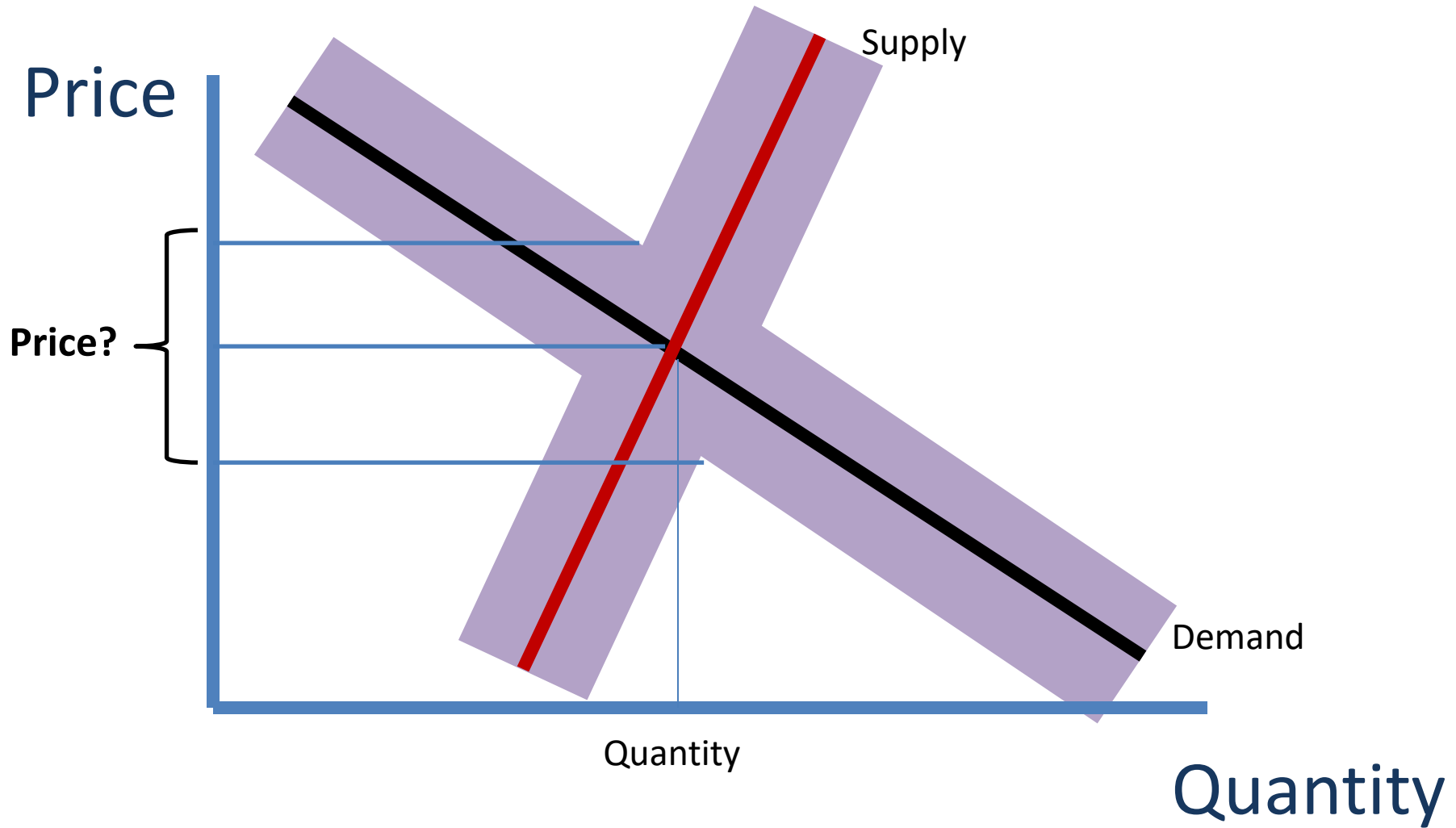
*The impounding of new information into
an asset price*



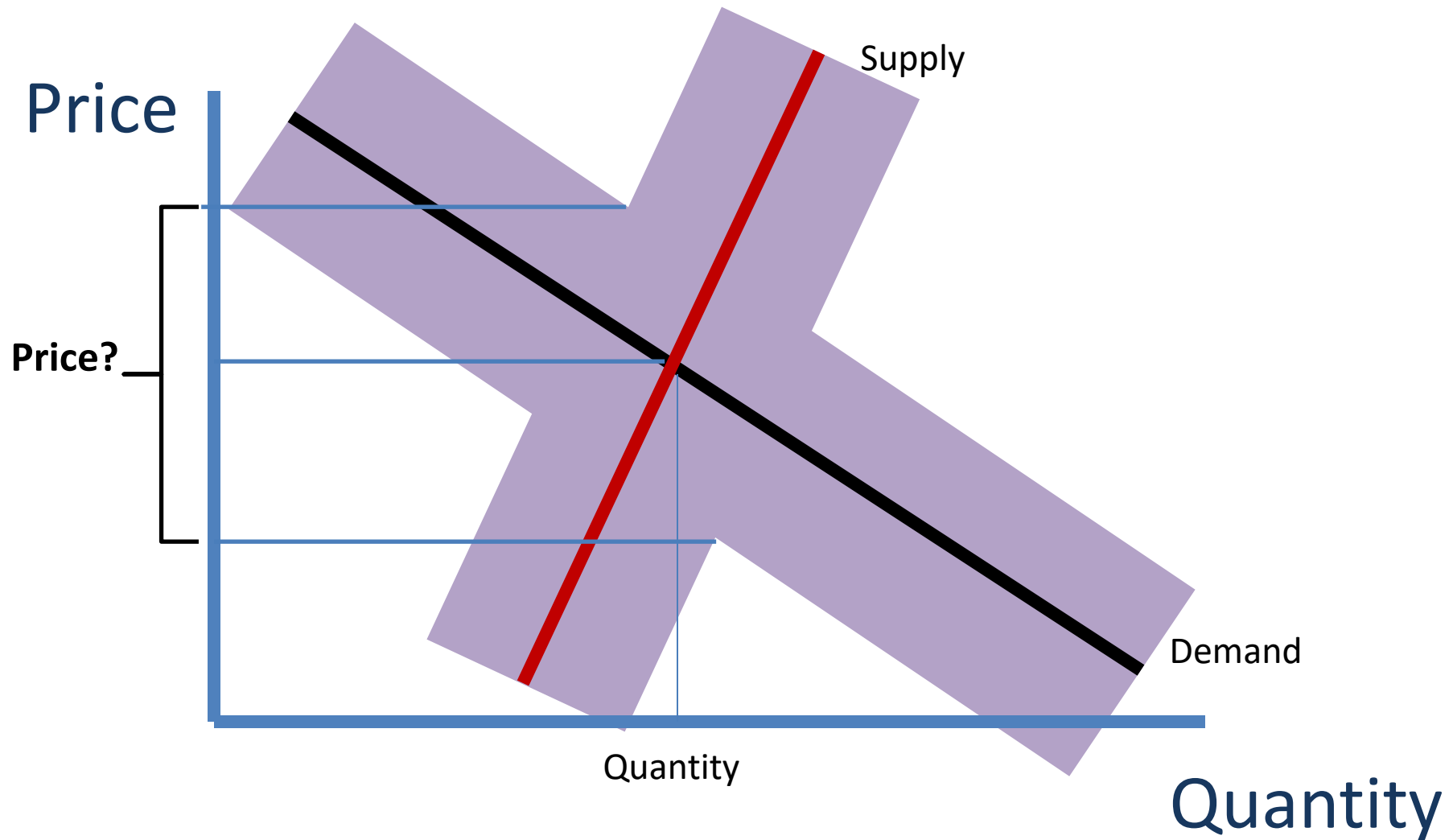
Price Discovery



Price Discovery – informed market



Price Discovery – information starved



How is Price Discovered?



Start Price* = USDA Wt. Avg. Nebraska Dressed Beef Price*	
Option 2 Bid = Start Price*	Call Corporate office 785-628-3000 We will then call you with a bid
*Amount to add to Start Price to determine Choice YG 3 Base Price	100% - Grade % in plant * Ch/Select Sp
Ch/Select Spread (Minimum of \$4.00)	USDA Previous Week's 5 day Average
Premiums & Discounts to add or subtract from Base	
Prime/Ch Spread	\$8.00 Premium
CAB/Ch Spread	\$5.00 Premium
**Swift Premium Classic Standards	\$4.00 Premium
Commercial/Heiferette	\$10.00 under Select
Dark Cutters, Yellow, etc	\$30.00 under Select
Condemned cattle	Market
Yield Grade 1	No Value
Yield Grade 2	\$5.00 Premium
Yield Grade 3	\$3.00 Premium
Yield Grade 4	Base
Yield Grade 5	\$15.00 under YG 3
535# / Down	\$25.00 under YG 3
1000# / Up	\$15.00 Discount from base price
	\$15.00 Discount from base price

Please call for current premium paid for Source & Age Japan eligible
**Swift Premium Classic=Upper 2/3 Choice Non-black hided cattle (only at Grand Island)

*Example to figure amount
If the plant grade avg. was 60%
to the Start Price (NE Wtd. Avg.)
then 100% - 60% = 40% x \$15

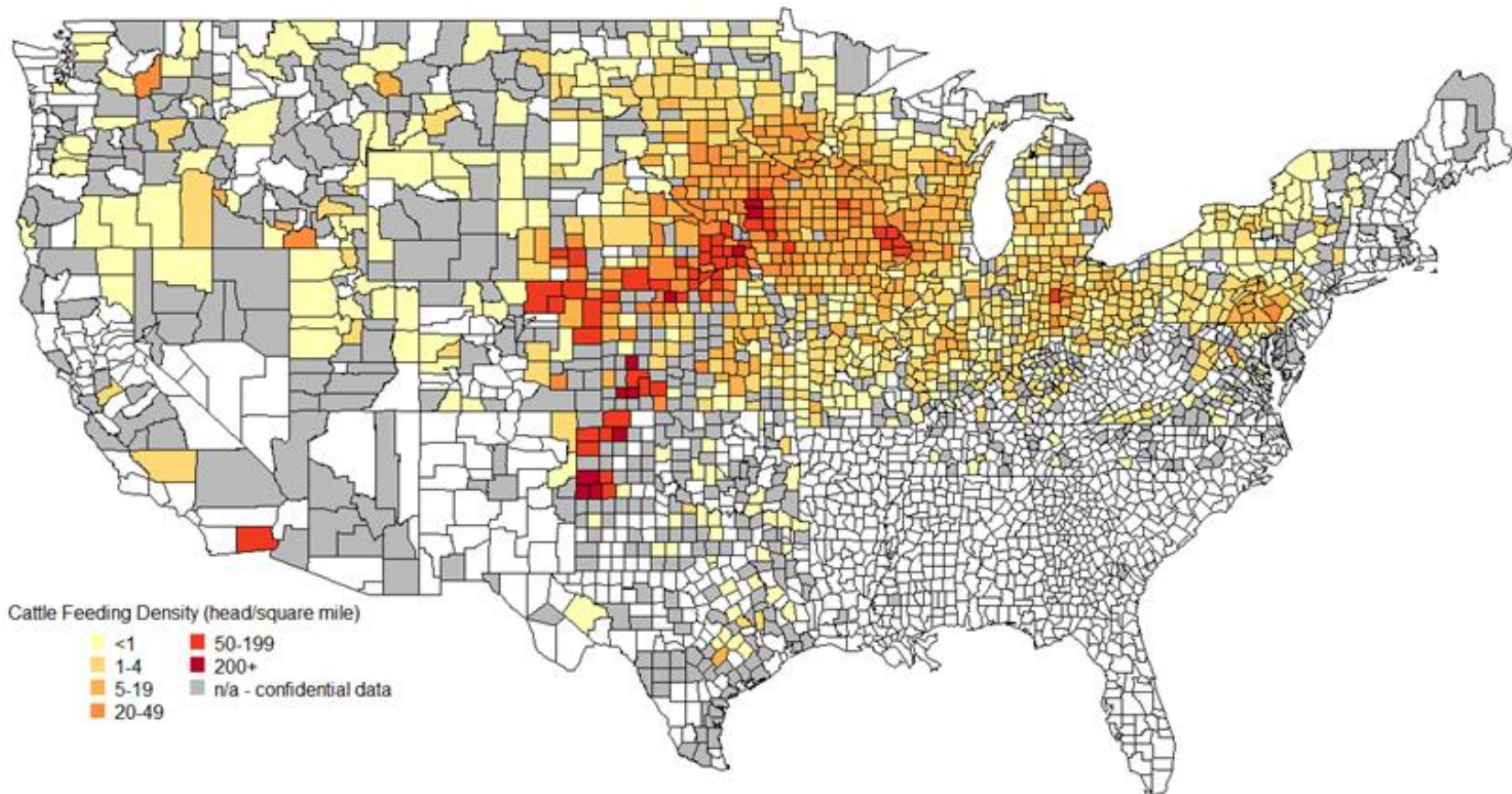


Price Discovery in Fed Cattle

Describing the “contestable market”

- Perishable commodity – **temporal**
- Costly to transport (bulky, animal shrink) – **spatial**
- 4 large potential buyers (Cargill, Tyson, JBS, National) – **structure**
- Excess capacity in cattle feeding vs. slaughtering
- Several ways to price (live, dressed, grid, formula, negotiated) – **quality**

Cattle Feeding Density by County, US Census Data, 2017



Livestock Mandatory Reporting (LMR)

- LMR Act of 1999 implemented 2001
 - Industry requested increased market transparency
- LMR undergoes reauthorization ~ every 5 years
 - September 2005 statutory authority lapsed
 - 2013 Fed Gov't shutdown blackout LMR
 - 2018 Fed shutdown LMR was “essential”
 - **LMR expires Sept 30, 2020 - next reauthorization**

**Ted's advice: Keep reauthorization uncluttered
Don't confound with policy and regulatory add-ons**



LMR Evolved

- LMR information became “essential”:
 - Primary price discovery information source

And it also became.....

- Base price contracts/ formula agreements
- Futures settlement (lean hogs)
- Livestock price insurance products
- Indemnity payments
- Policy analysis



LMR Reporting Structure

- Packers slaughter 125,000+ hd annual report – twice daily
- ~ 40 cattle plants covered
- Covers about 92% national fed cattle transactions

Purchase Types

1. *Negotiated Cash* – cash purchases 0-30 day delivery
2. *Formula* – price of formula any means other than negotiated, grid, or forward contract
3. *Forward Contract* – forward purchase base reference to CME
4. *Negotiated Grid* – base negotiated, final net price grid
5. *Packer-Owned* – cattle owned by packer at least 14 days



Livestock Mandatory Price Reporting (LMR)

Challenges

- Changing industry structure requires flexibility
- Changing market contracts/agreements
- Thinning cash negotiated trade
- Large regional differences in cattle marketing
- Confidentiality of data reporting
- Product proliferation / branding

Livestock Mandatory Price Reporting

Livestock Mandatory Reporting was developed to facilitate open, transparent trading among participants, both large and small, with comparable levels of market information. It covers cattle, lamb meat, and wholesale pork.

Average Number of Firms per Week

January – June 2018

	0-30 Day	0-14 Day	15-30 Day
National	7.27	7.11	3.46
5-Area	7.27	7.11	3.35
Iowa/MN	6.76	6.51	2.68
Nebraska	6.24	5.92	2.32
Kansas	4.32	4.32	0.84
TX/OK/NM	3.03	2.97	0.41
Colorado	2.65	2.57	0.65

Passing

Occasionally Passing

Failing

Confidentiality Constraint in LMR “3/70/20”

*Roughly: must be at least 3 packers purchasing regularly
in the region over last 12 weeks*

Livestock Mandatory Reporting (LMR)

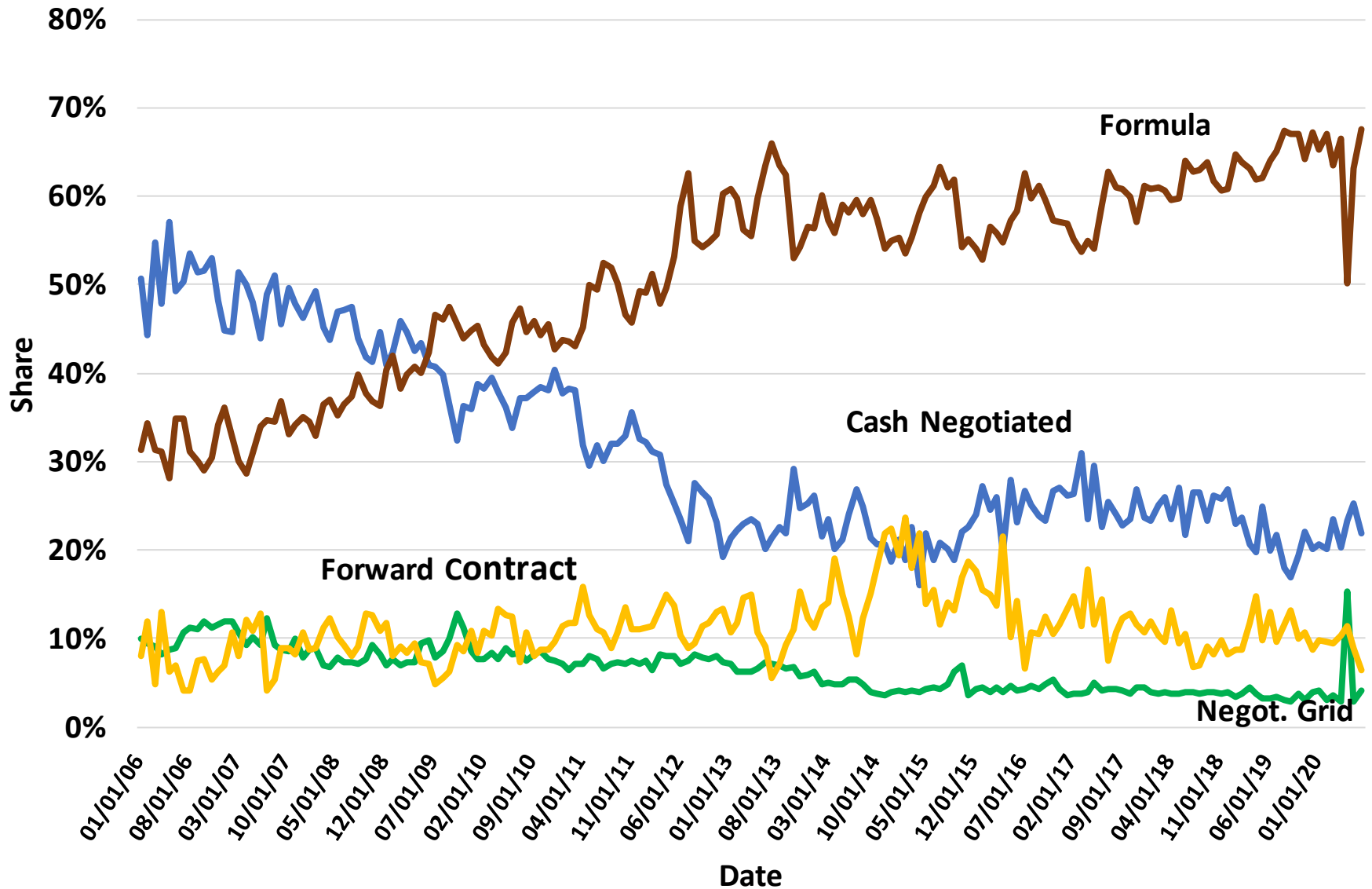
Confidentiality Guidelines for the Livestock Mandatory Reporting Program

...

The Livestock Mandatory Reporting Act of 1999 requires USDA to publish mandatory data on livestock and meat price trends, contracting arrangements, and supply and demand conditions in a manner that protects the identity of reporting entities and preserves the confidentiality of proprietary transactions.

<https://www.ams.usda.gov/sites/default/files/media/ConfidentialityGuidelines.pdf>

Slaughter Cattle Marketing Methods, Monthly 2006 - July 2020

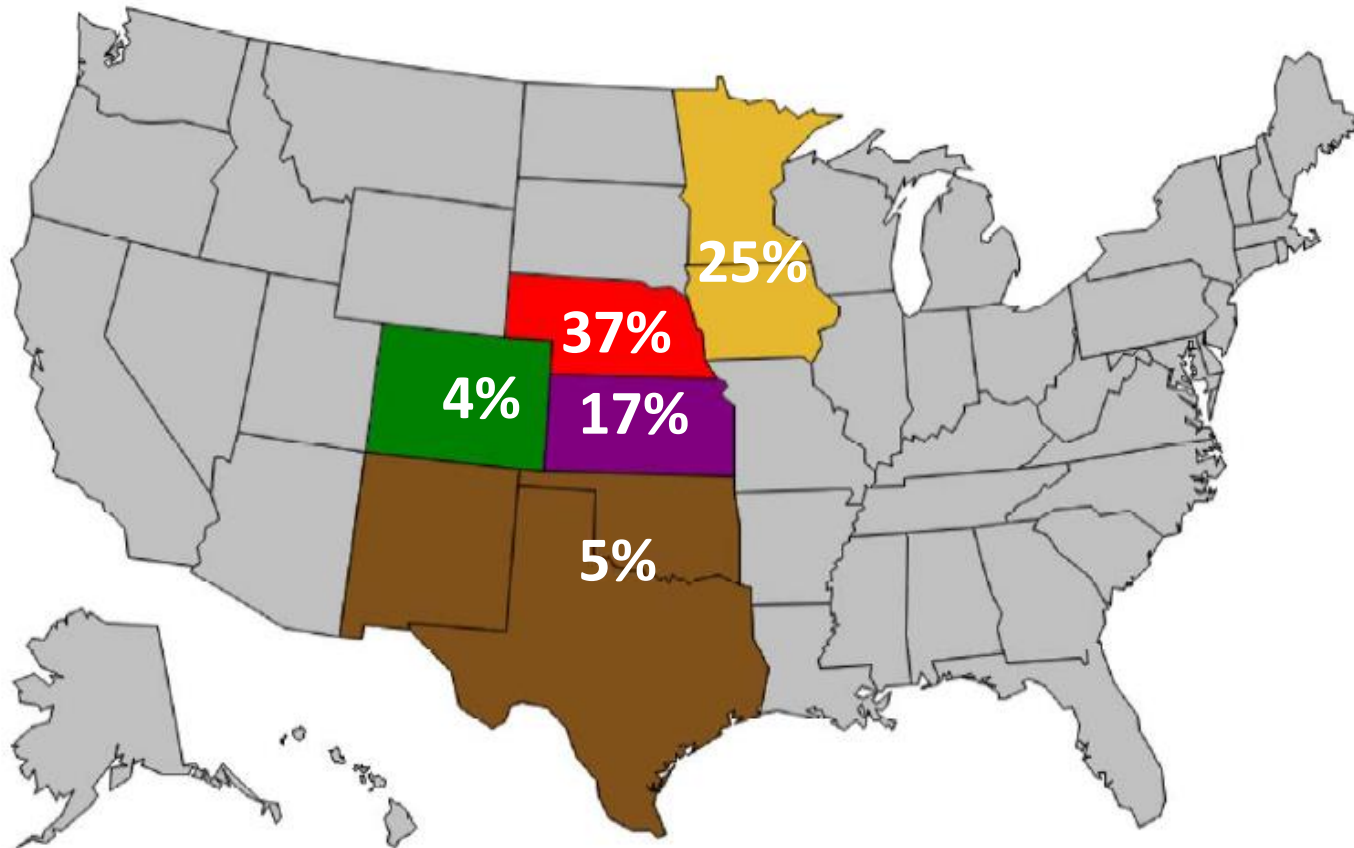


Source: USA, AMS

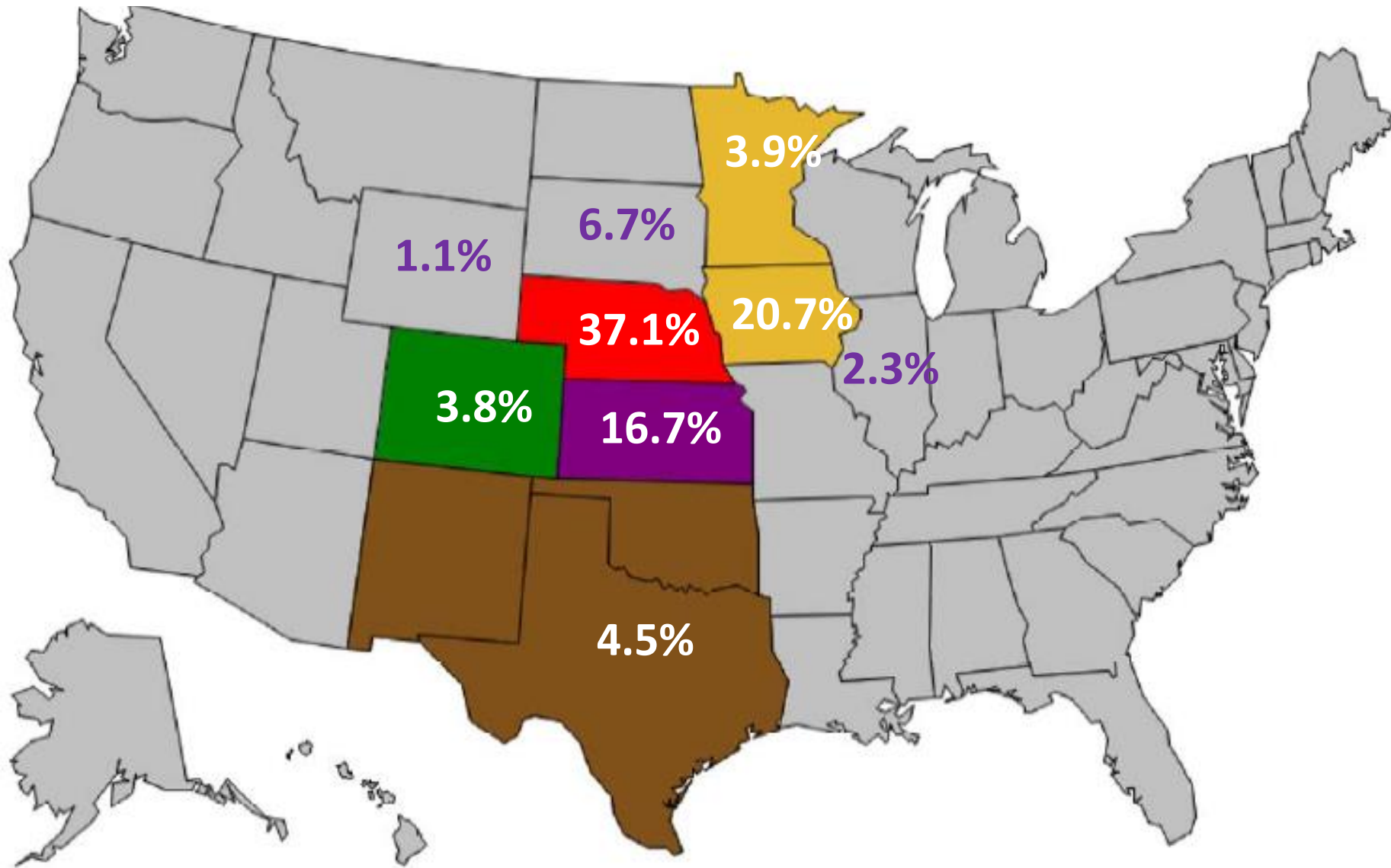
Shares National Domestic Fed Cattle (non-dairy) Negotiated Cash Trade in 5-Areas, 2014-18

Alignment 1 - Current AMS Regions

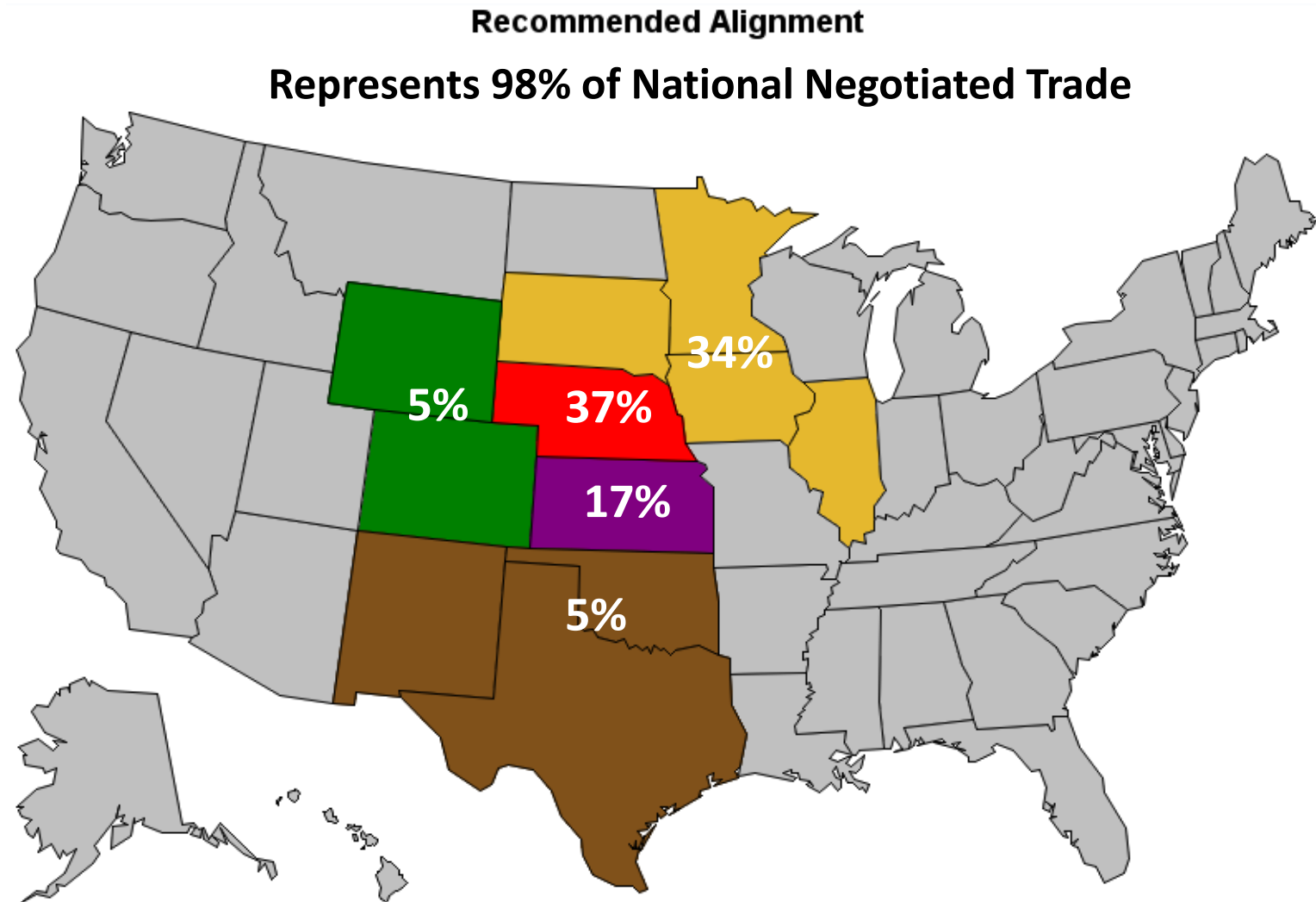
Represents 88% of National Negotiated Trade



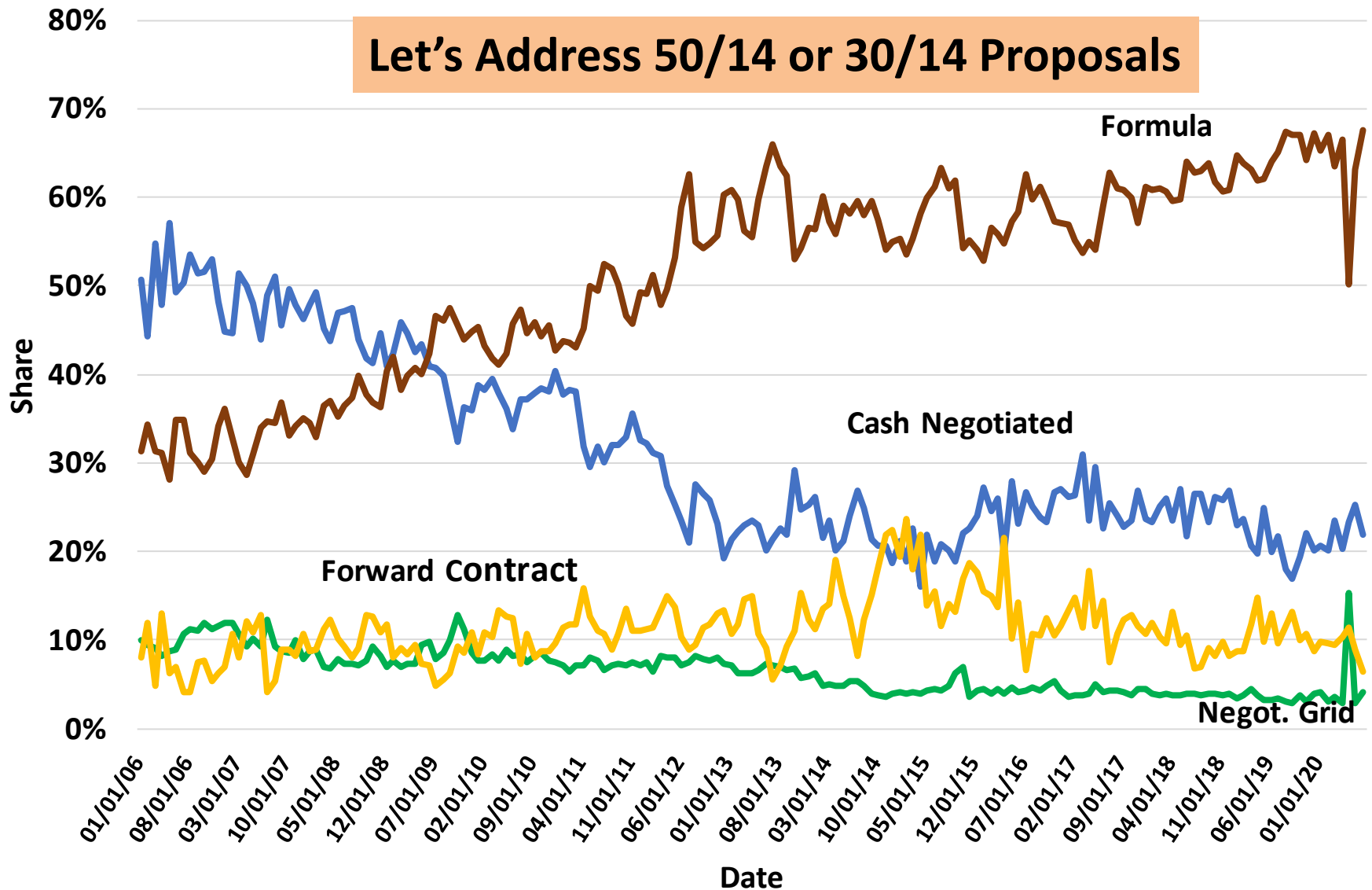
Shares Negotiated Transactions, States Representing at least 1% of Negotiated Volume, 2014-18



Shares National Domestic Fed Cattle (non-dairy) Negotiated Cash Trade in 5- NEW Areas, 2014-18



Slaughter Cattle Marketing Methods, Monthly 2006 - July 2020



Source: USA, AMS

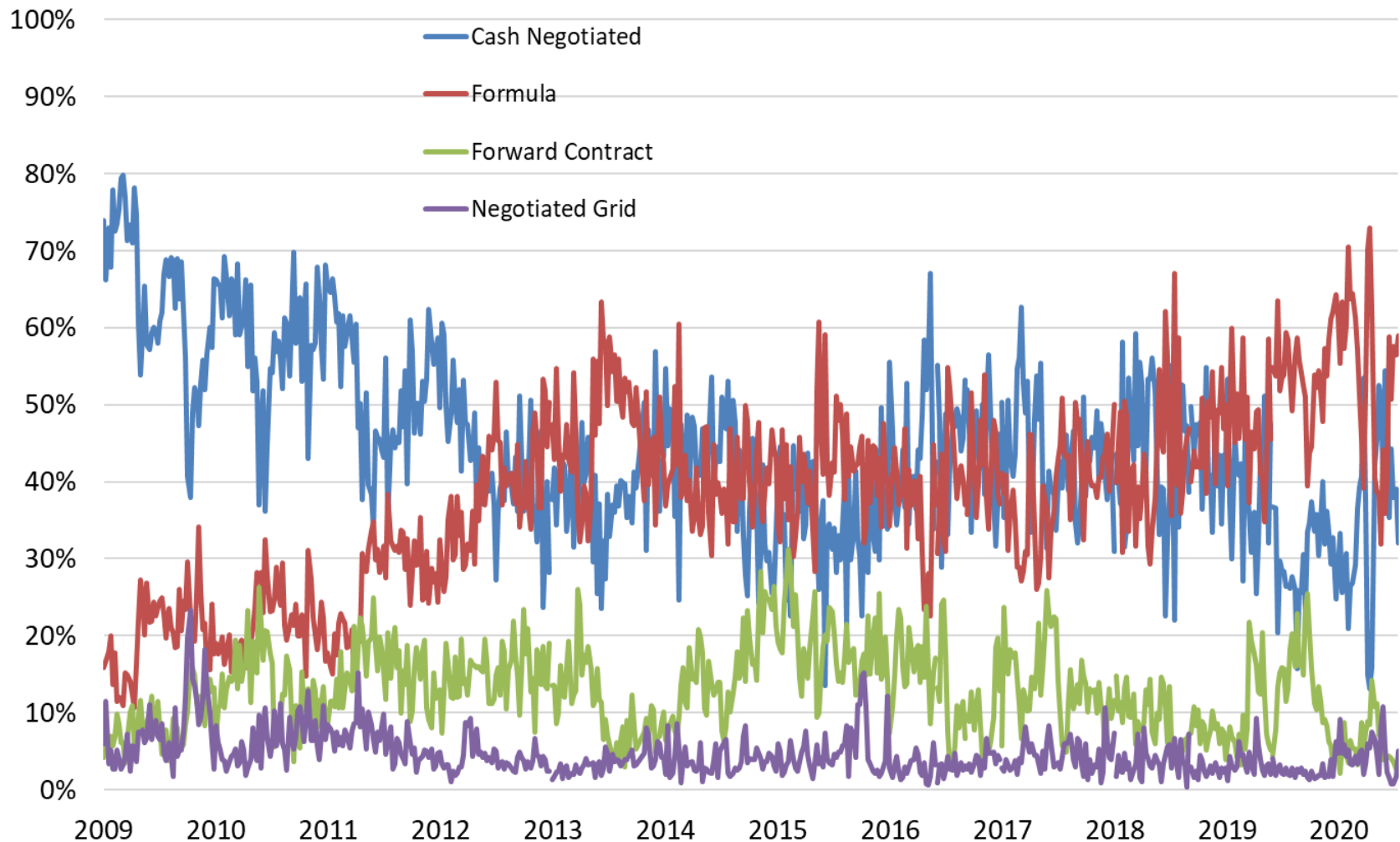
50/14 or 30/14 Proposals

**Require 50% (30%) fed cattle purchased weekly
negotiated cash market delivery no longer than 14 days**

Issues:

- **Major regional differences**
NE, IA, SD(?) already often close
TX, CO miles away
- **Who decides what is negotiated?**
- **Who decides which cattle feeders must negotiate?**
- **Do we regulate any other commodity market in this way?**
- **Potential benefits?**
- **Potential costs?**

Percentage of Weekly Live Cattle Marketed by Transaction Types in Nebraska

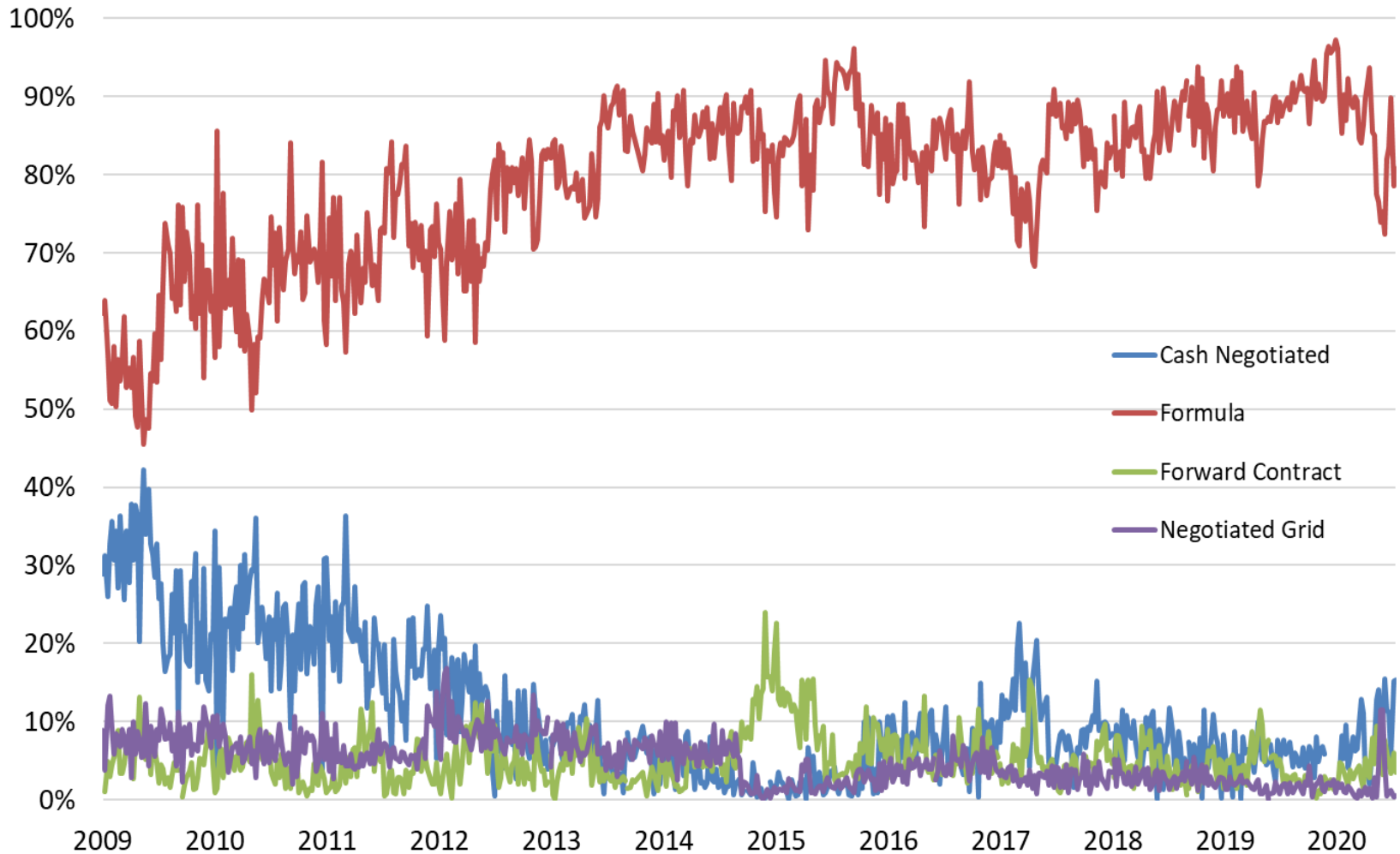


Data Source: USDA AMS Livestock Mandatory Reporting Data Mart

Numbers are all live and dressed head reported in a given week for each transaction type

Negotiated Grid was not tracked prior to mid-2008.

Percentage of Weekly Live Cattle Marketed by Transaction Types in Texas



Data Source: USDA AMS Livestock Mandatory Reporting Data Mart

Numbers are all live and dressed head reported in a given week for each transaction type

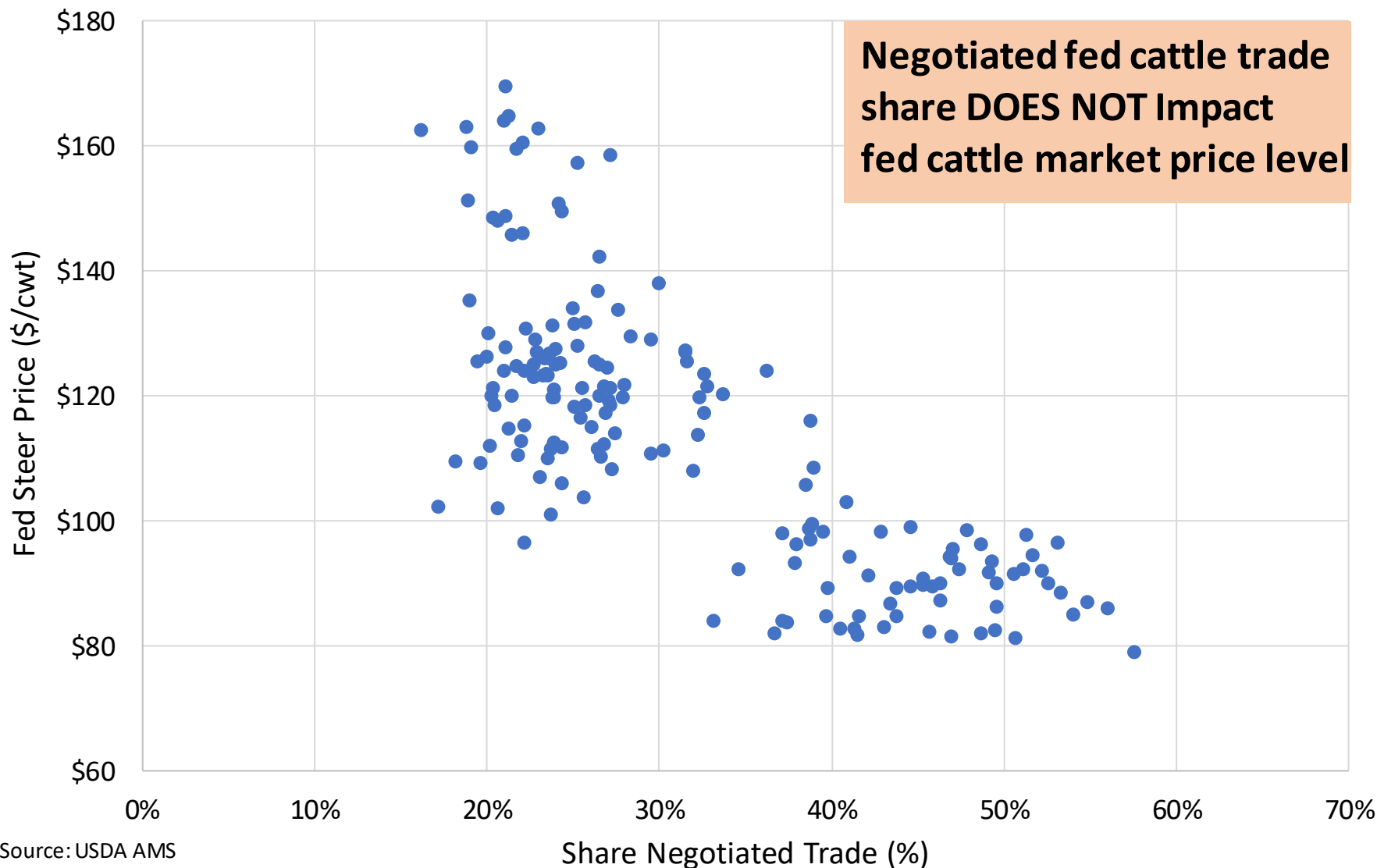
Negotiated Grid was not tracked prior to mid-2008.

50/14 or 30/14 Proposals

Potential Benefits	Potential Costs
More price discovery	Increase feedlot & packer costs
More regional representation	Increase feedlot & packer risk
More confidence in negotiated prices	Reduce beef quality-price signals
More packing plants regularly bidding in negotiated market	Fewer packers competing in formula market
More feedlots engaged in discovery	Reduce supply chain coordination
More informed futures market	Challenge beef product brands

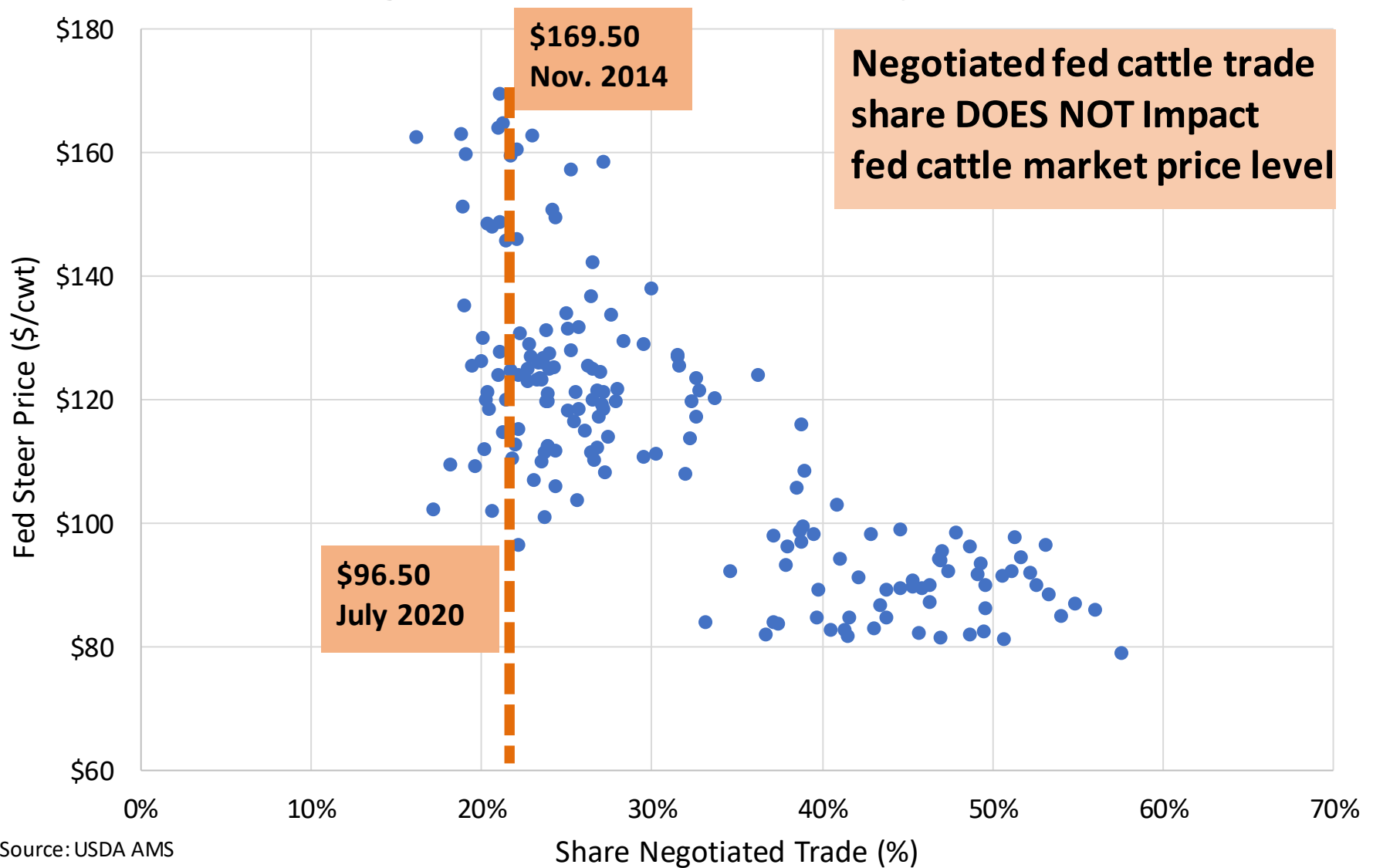
Would benefits outweigh the costs?

Monthly 5 Area Live Fed Steer Price vs. Percentage of Negotiated Trade, 2006 - July 2020

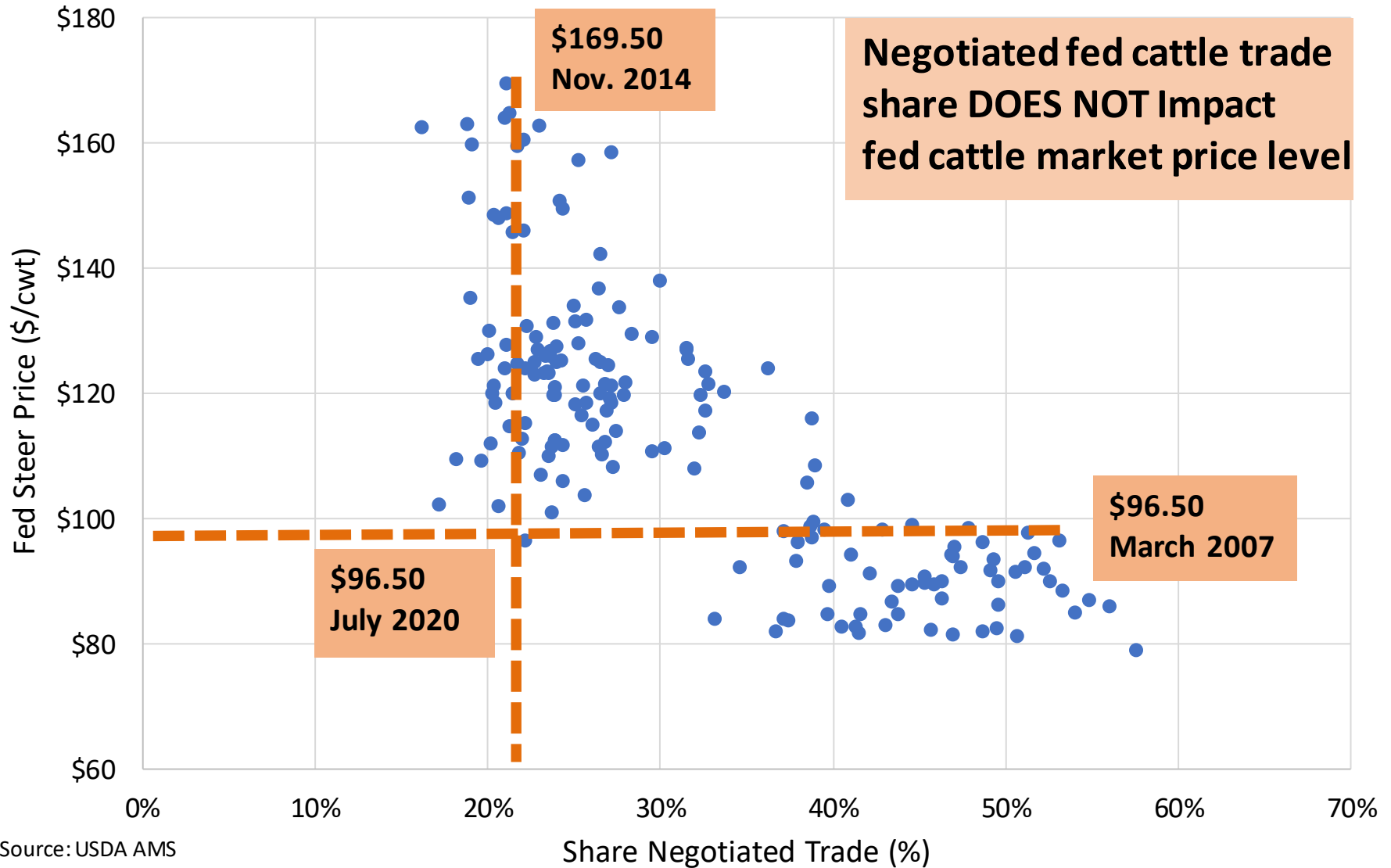


Source: USDA AMS

Monthly 5 Area Live Fed Steer Price vs. Percentage of Negotiated Trade, 2006 - July 2020



Monthly 5 Area Live Fed Steer Price vs. Percentage of Negotiated Trade, 2006 - July 2020

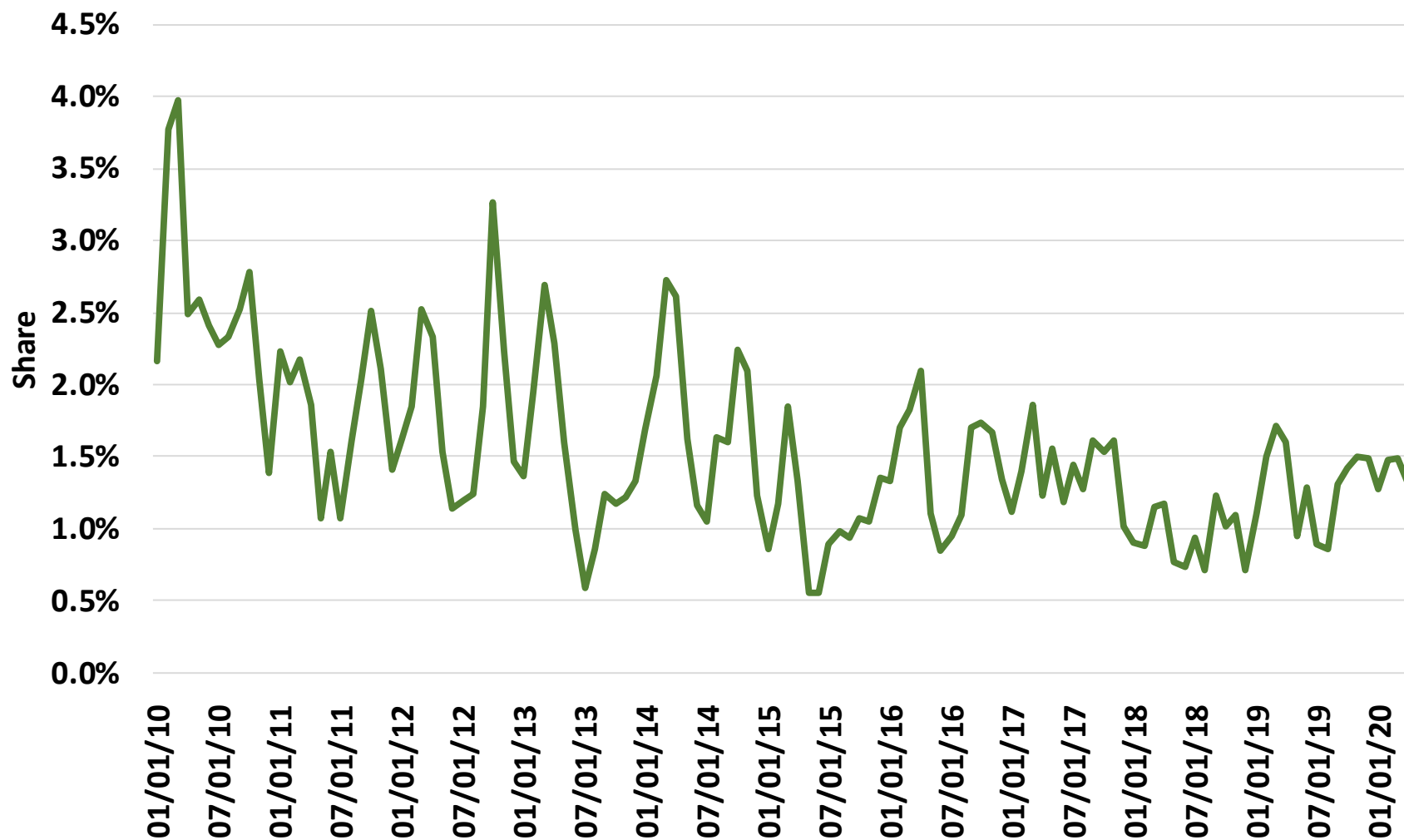


A photograph of a dirt road winding through rolling hills. The hills are covered in golden-brown grass, and the sky is a clear, pale blue. The road is dark and appears to be made of dirt or gravel, with visible tire tracks. It starts in the foreground and curves into the distance, following the contours of the hills. The lighting suggests it might be late afternoon or early morning, with long shadows and warm tones.

Ted Schroeder
Kansas State University
tcs@ksu.edu

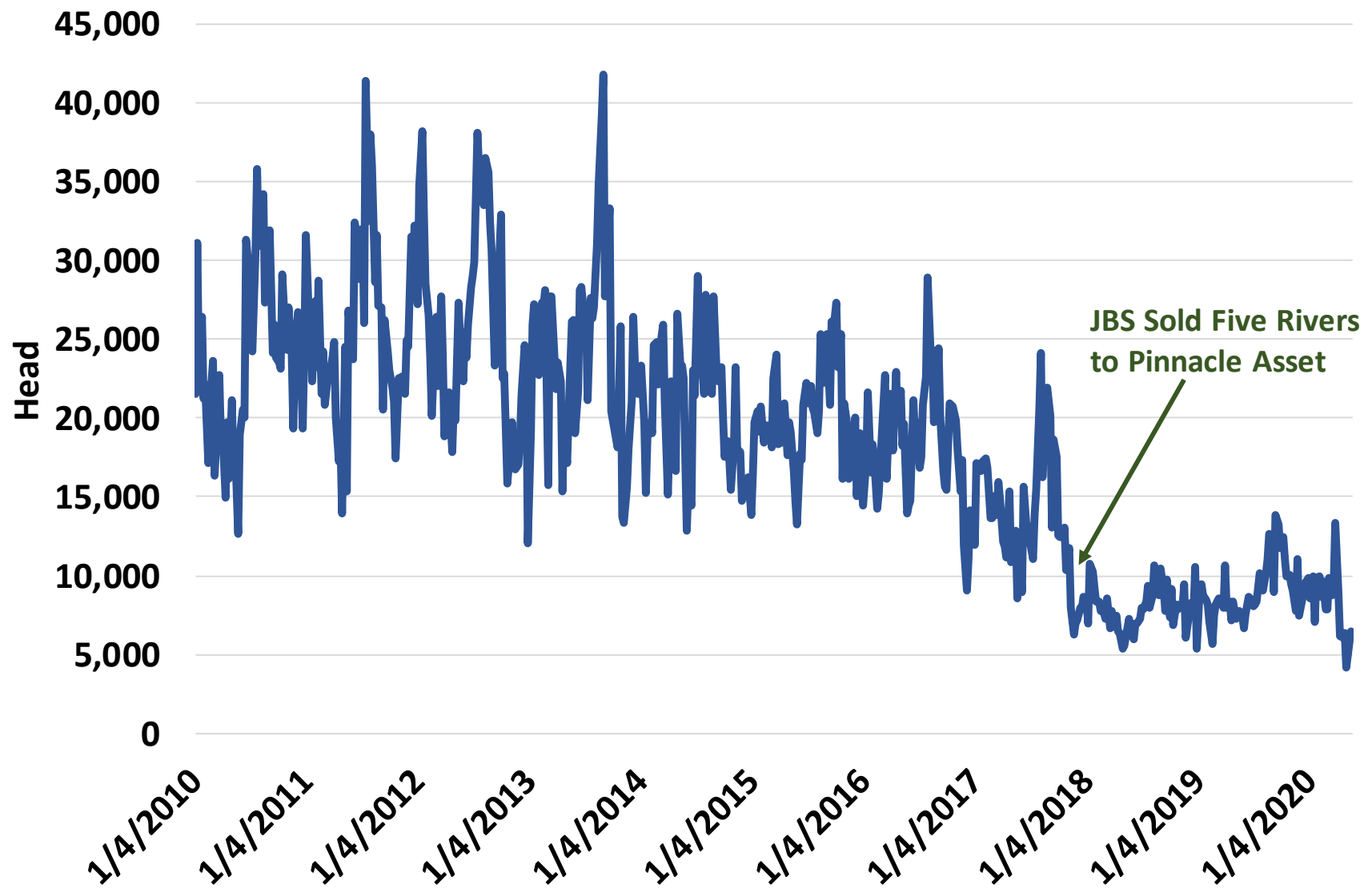
Photograph by Michael Forsberg

Monthly Slaughter Cattle Imports as Share of Total Slaughter, 2010 - April 2020



Source: USA, AMS

Packer-Owned Weekly Fed Cattle Slaughter, 2010-May 2020



Source: USDA AMS

Dimensions of Price Discovery?

- 1. Search costs – matching buyers and sellers**
(temporal, spatial, volume, quality)
- 2. Information, market intelligence, analytic ability/time**
(informed about supply and demand fundamentals)
- 3. Cost of process vs. value of commodity**
(high volume-low value commodity, low unit cost discovery)
- 4. Product storability, transportability**
- 5. Existing market institutions**
- 6. Market leverage**
- 7. Product differentiation / specification**

Confidentiality Guidelines Livestock Mandatory Reporting Program

3/70/20 confidentiality guideline requires following three conditions:

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