



The U.S. model of management and how to apply it in your business.

Kevin C. Dhuyvetter, PhD
 kcd@ksu.edu
 Department of Agricultural Economics
 Kansas State University
 Manhattan, Kansas, USA



September 13, 14 and 15 | Goiânia, GO - Brazil



Management model for U.S. agriculture...

- Characteristics of management model
 - High productivity
 - Cost efficient
 - Technology adoption / economies of size
 - Competitive
- } Minimize cost per unit of output
- Are things changing?
 - Price risk management increasing in importance?
 - Relationships/alliances increasing in importance?

Management model for U.S. agriculture...

- There is no “one” model that describes the management of U.S. feedlots – the industry is comprised of many different management “styles and approaches.”
- Examining trends in the U.S. beef industry, and specifically the feedlot sector, will help identify issues that feedlot managers face.

Production “sectors” in the U.S. beef industry



1) Cow-calf



2) Stocker/backgrounder



3) Feedlot

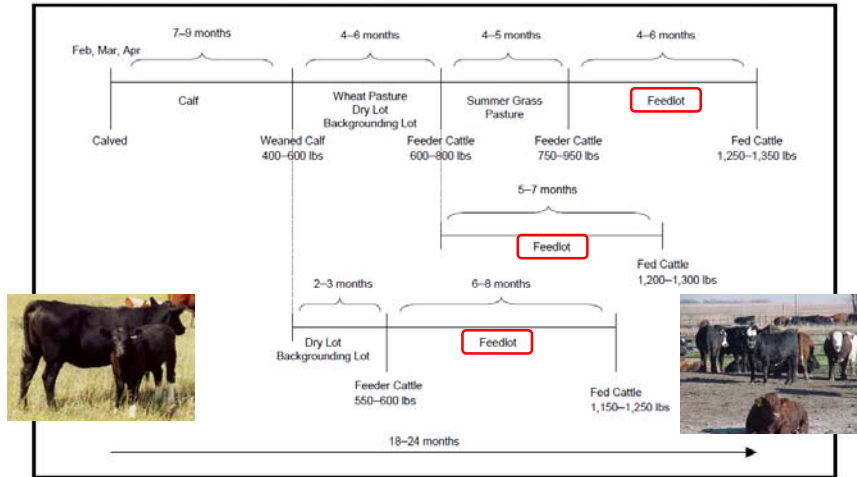
} Ownership is generally separate across the three sectors

Implications – competition, industry polarization, and slow response to changing markets.

Multiple production systems are used in the U.S. beef industry

Figure 1-1. Typical Cattle Production Timeline: Spring-Calved Beef Animal

The method of raising cattle can vary depending on the available resources and the desired finished weight.

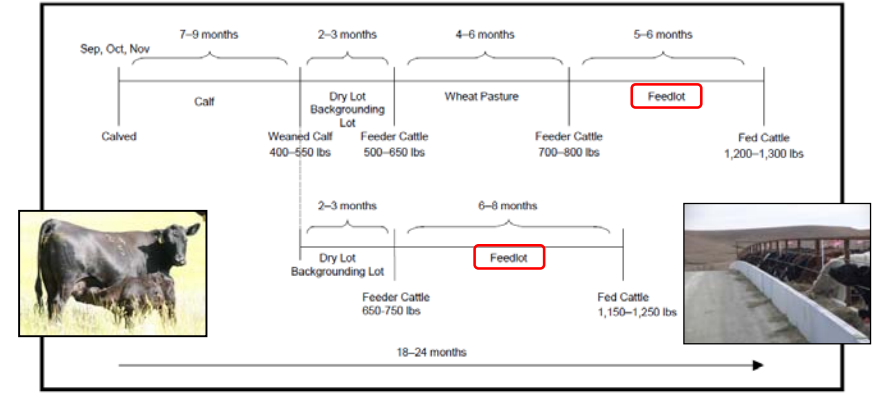


Source: RTI International, RTI Project #0209230, January 2007

Multiple production systems are used in the U.S. beef industry

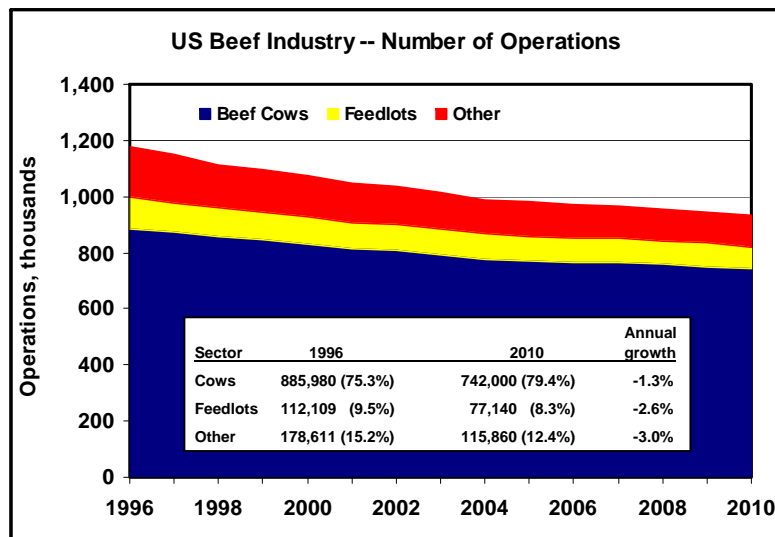
Figure 1-2. Typical Cattle Production Timeline: Fall-Calved Beef Animal

Changing calving season can allow producers to use different resources.

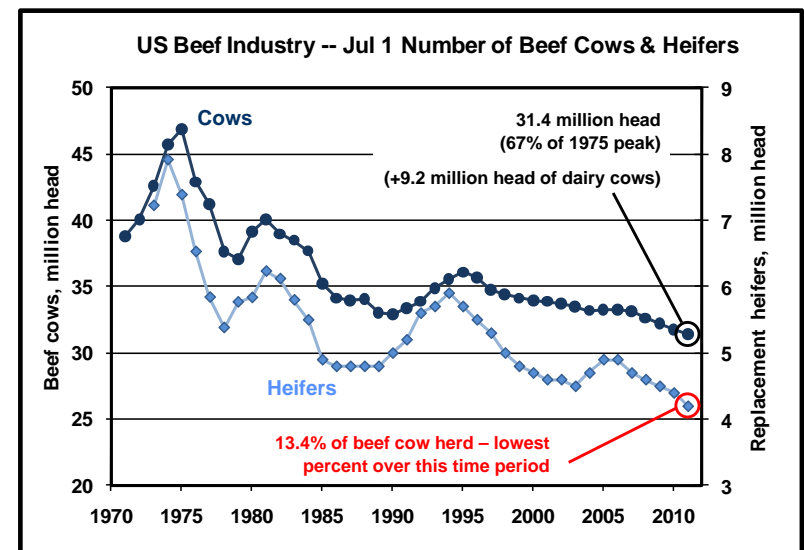


Source: RTI International, RTI Project #0209230, January 2007

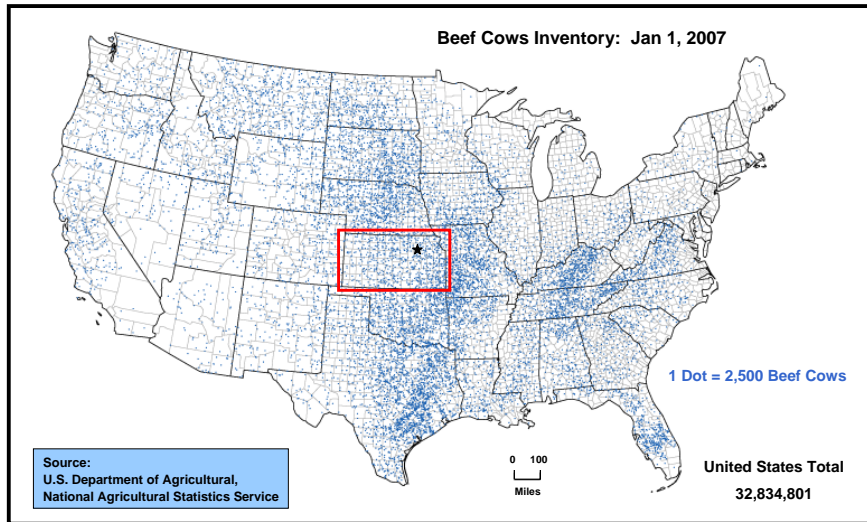
Fewer operations in all sectors of the beef industry



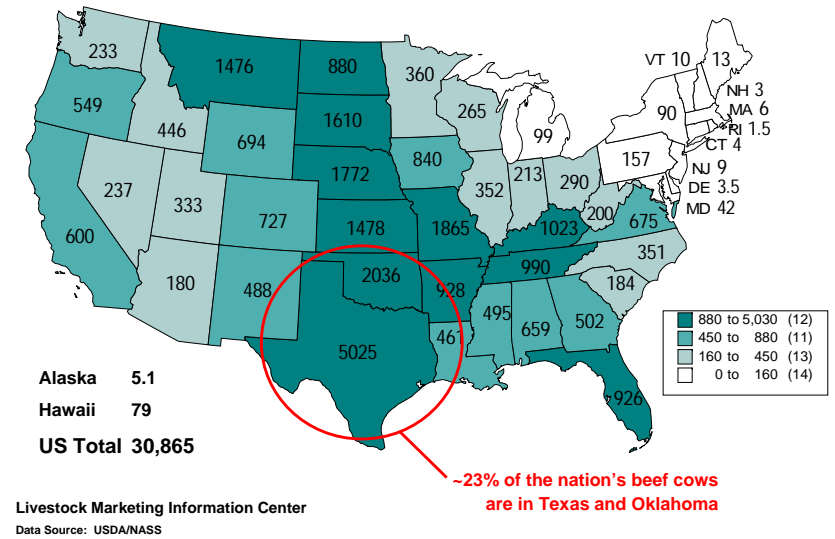
U.S. beef cow inventory is at lowest level in 40+ years



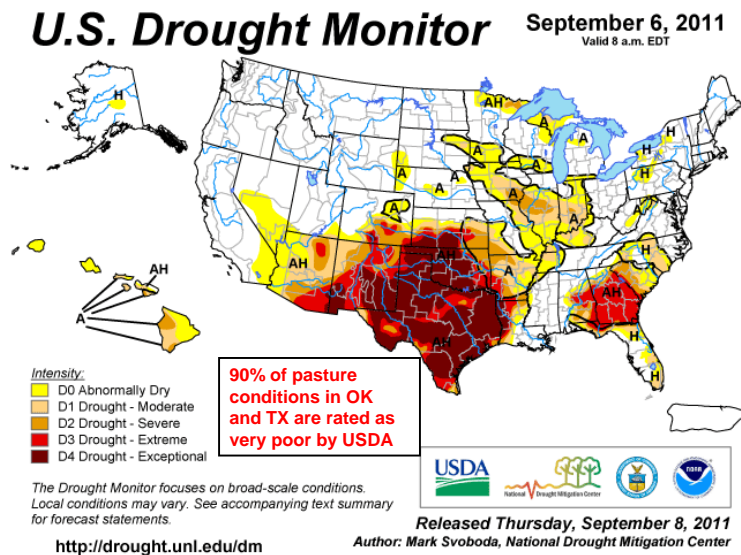
Beef cows are located throughout much of the U.S.



Beef cows that have calved Jan 1, 2011 (1000 Head)



Oklahoma and Texas are experiencing a major drought...



Average herd size and distribution

Average beef cow herd size increased from 40.4 in 2000 to 42.3 in 2010, but averages can be somewhat deceiving...

Farm size (cows/farm)	Percent of operations		Percent of inventory	
	2000	2010	2000	2010
1-49	78.8	79.2	29.5	28.0
50-99	12.0	11.1	19.1	17.4
100-499	8.5	8.9	36.7	38.0
500+	0.7	0.8	14.7	16.6

Roughly 10% of the operations control over 55% of the cows (diverse cow-calf sector)

Cattle feeding sector (feedlots)

- **Diverse industry**

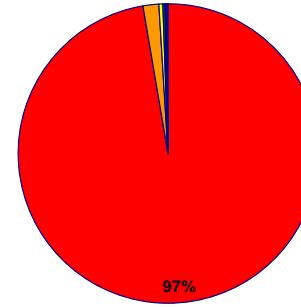
- Large commercial feedlots to small “farmer-feeder” lots
- Custom feedlots versus company owned cattle
- Commodity beef versus targeting specific market(s)
- Goal is to add weight at lowest cost (grain vs. forage)



Feedlot sector...

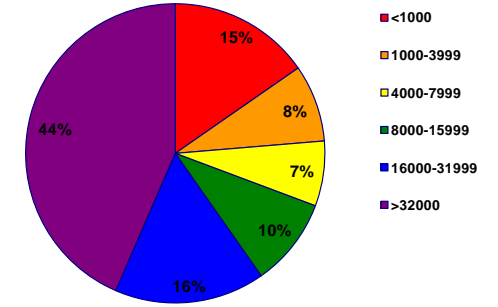
Majority of feedlots are small (farmer-feeders), but they account for a relatively small share of total marketings.

Number of Feedlots by Capacity



Total (2008-10 avg) = 80,493 feedlots

Fed Cattle Marketings by Feedlot Capacity

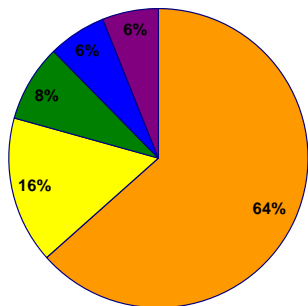


Total (2008-10 avg) = 26,055,000 head

Feedlot sector...

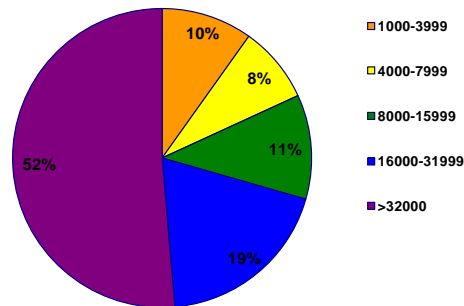
1000+ head feedlots represent 2.7% of all feedlots in U.S., but account for 84.7% of fed cattle marketings...

Number of Feedlots by Capacity



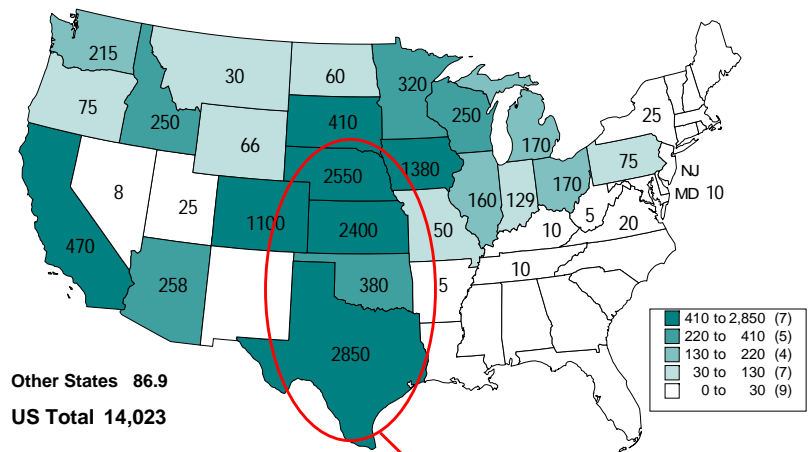
Total (2008-10 avg) = 2,160 feedlots

Fed Cattle Marketings by Feedlot Capacity



Total (2008-10 avg) = 22,058,000 head

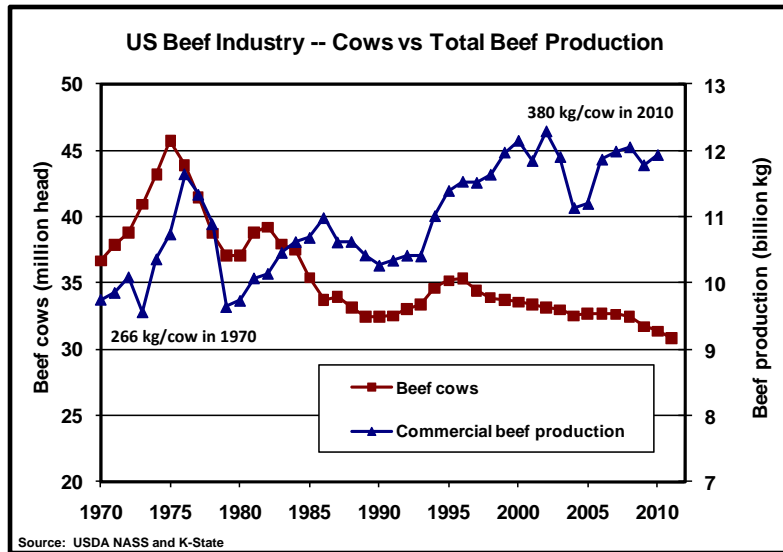
Cattle on feed Jan 1, 2011 (1000 Head)



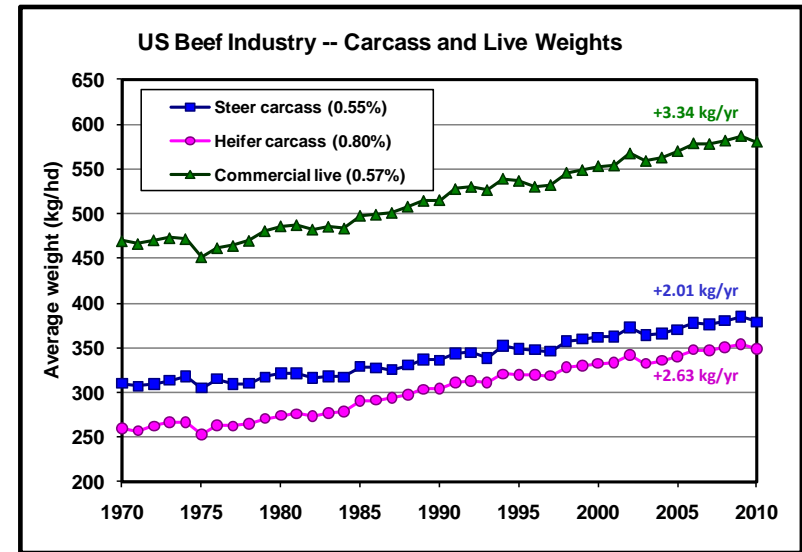
Livestock Marketing Information Center
Data Source: USDA/NASS

~56% of the nation's cattle on feed are in Nebraska, Kansas, and Texas.

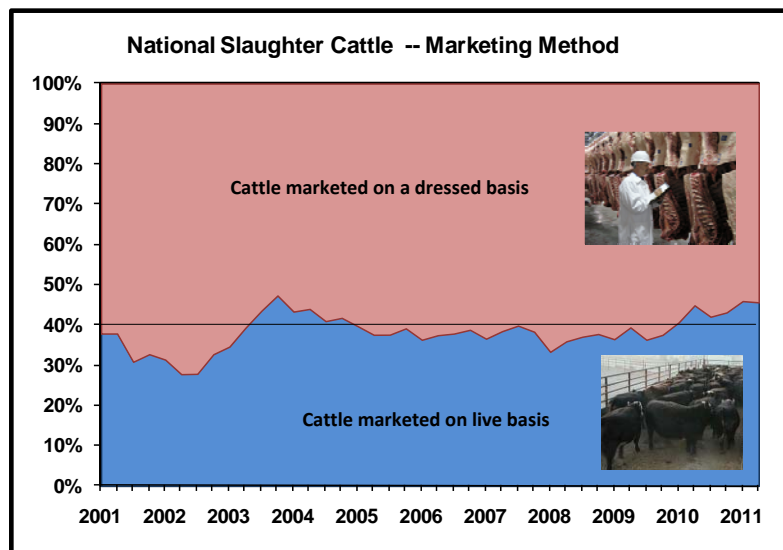
Beef production trending up over last 30 years



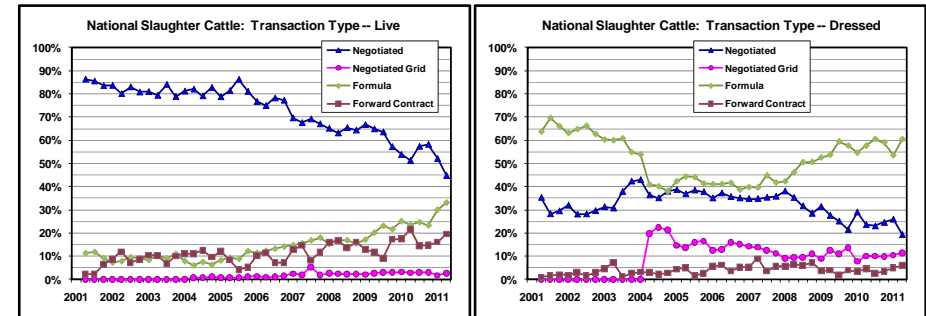
Cattle are being finished at heavier weights



Little change in marketing method in last 10 years...

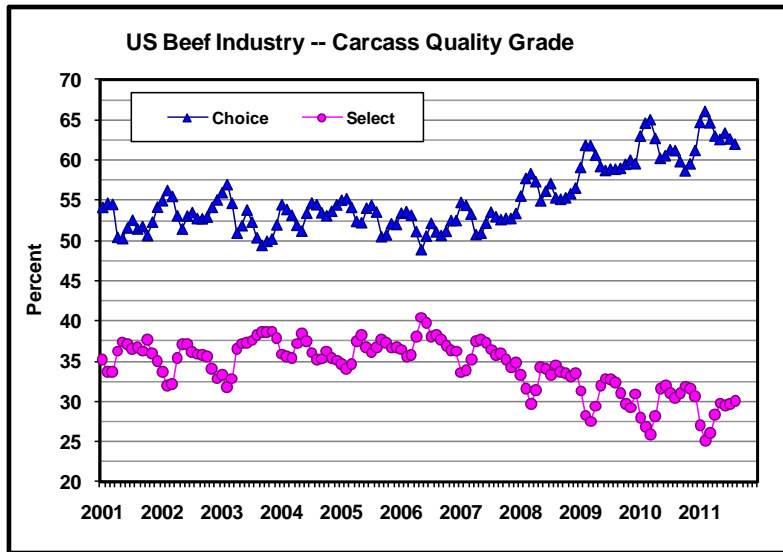


... bigger changes in how prices are set though



- Reduction in negotiated sales
- Formula prices and forward contracts are more common (especially with cattle marketed on a live basis)

Quality of carcasses has been improving

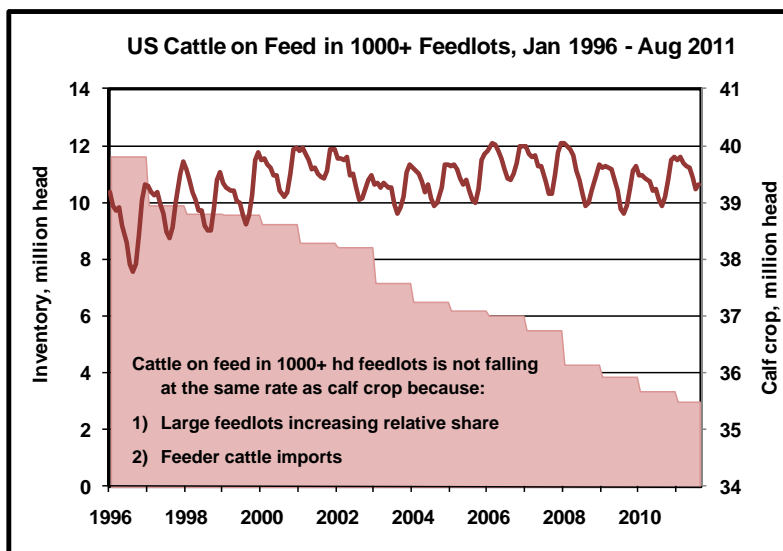


Cattle feeding sector (feedlots)

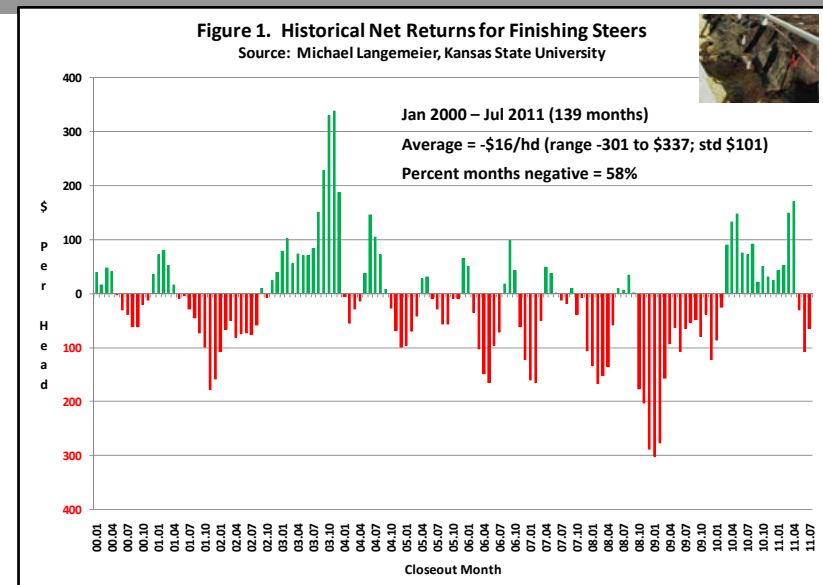
- As the industry increases the production of beef per cow, fewer cows are needed to produce the same amount of beef → excess feedlot capacity (unless the market grows).



Cattle on feed more constant than calf crop...



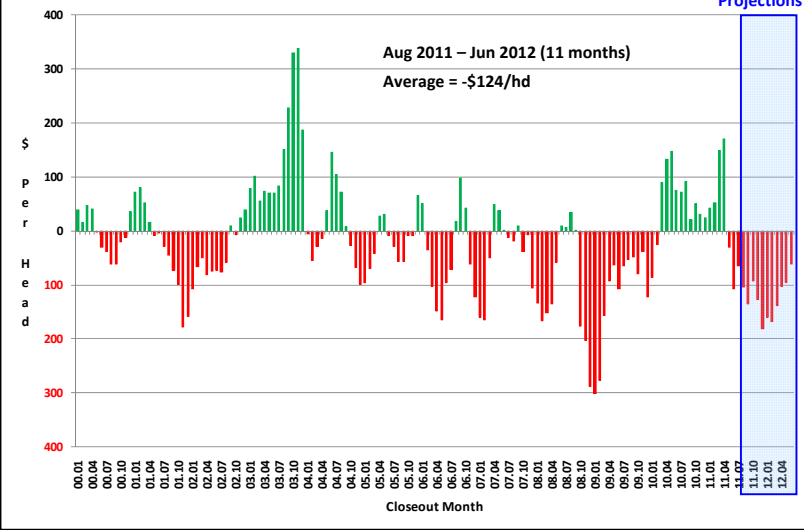
Economic returns – a sign of over capacity in industry?



Going forward, the short run doesn't look very good...

Figure 1. Historical Net Returns for Finishing Steers

Source: Michael Langemeier, Kansas State University

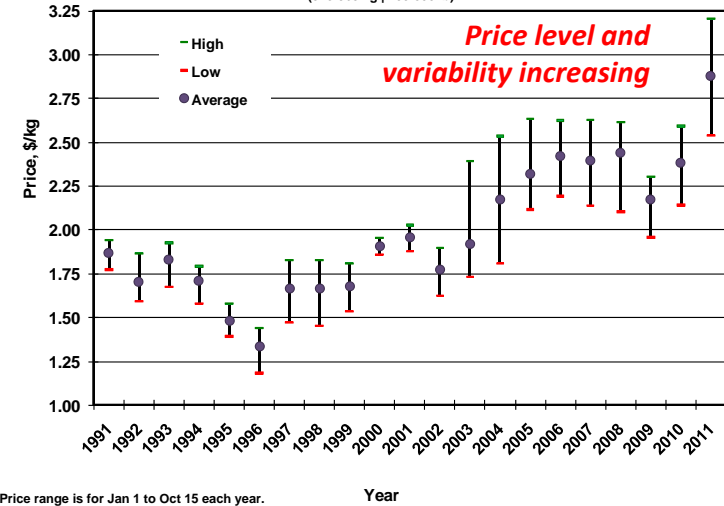


Feeder cattle futures price



Average Price and Price Range for OCT Feeder Cattle Futures

(318-363 kg | 700-800 lb)

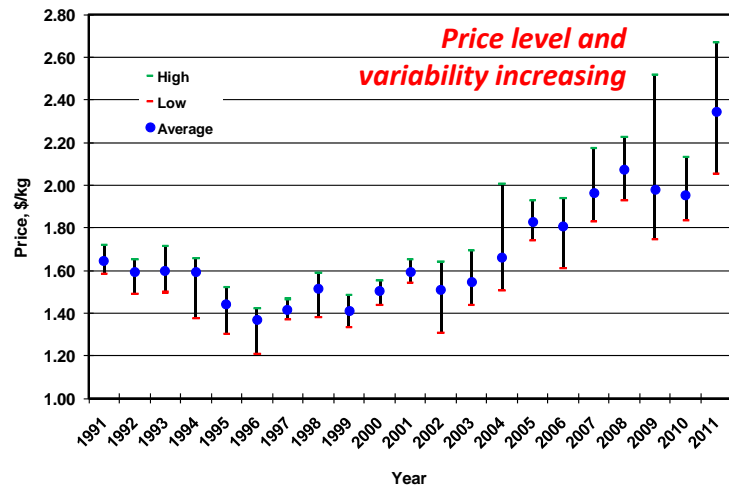


Live cattle futures price



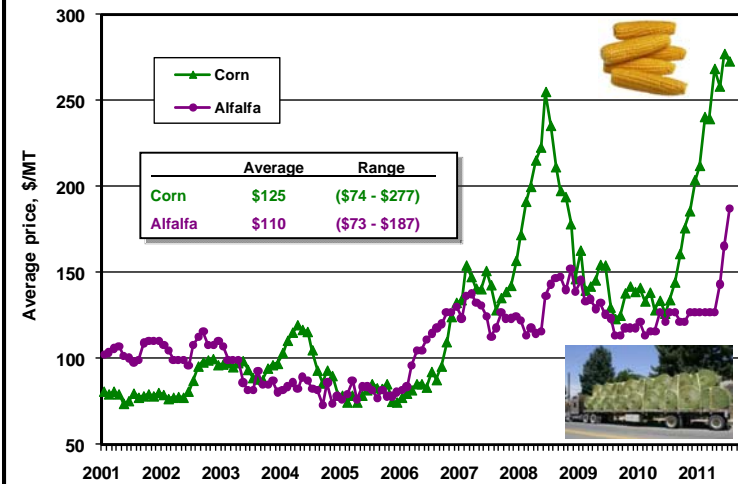
Average Price and Price Range for JUN Live Cattle Futures

(499-590 kg | 1100-1300 lb)

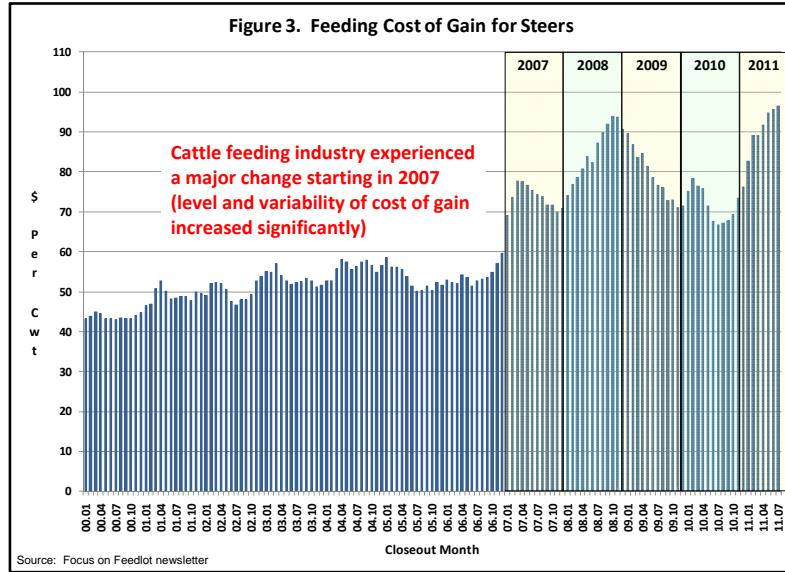


Feed prices (corn and alfalfa)

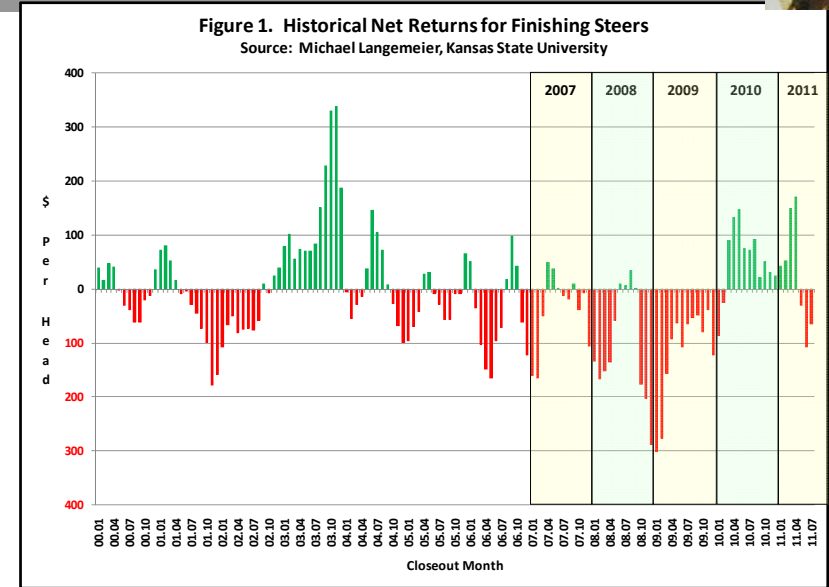
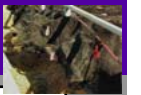
Monthly Average Corn and Alfalfa Hay Prices in Kansas



Feeding cost of gain for steers

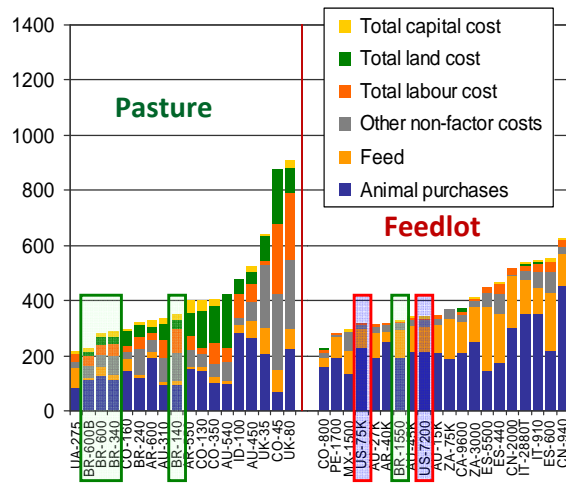


Weak relationship between profit and cost of gain



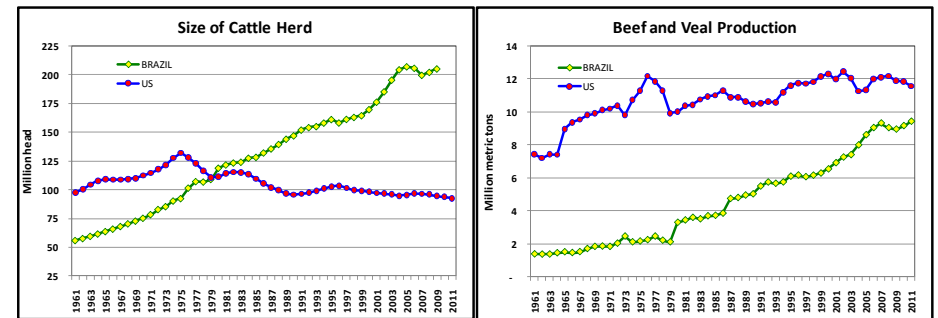
International benchmark comparisons – Beef finishing

US\$ per 100 kg carcass weight sold



Based on one year of data (2009) from one source, Brazil is very competitive with US for beef finishing in terms of cost of production.

U.S. and Brazil cattle industries...



- A “mature” industry versus a “growing/evolving” industry...
- Should same management approach be used in both countries?
- Identify and capitalize on comparative advantages

Summary

- **US feedlot industry: high productivity with low cost per unit of output → consolidation**
- **Price variability has increased significantly leading to more emphasis on risk management**
- **High corn prices → add weight prior to the feedlot (i.e., grazing and backgrounding programs)**
- **Current drought is impacting beef industry and likely will have long-lasting effects**
- **Vertical coordination becoming more important to respond to market signals (think global markets)**

Thank You!

Obrigado!

