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Latest Developments of Beef Production in North America (focusing primarily on U.S.)

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Townsville, Brisbane, AUSTRALIA

Public Forum in Brisbane

Fri, June 25

www.agmanager.info

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Outline of Presentation

- General U.S. Industry Trends
  - Number and size of beef operations
  - Beef production
- Cattle Price Trends
- Input Prices and Returns
  - Interest rates, corn prices, and feeding cost of gain
  - Beef cow and cattle finishing returns
- Trade and Other Issues

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General Industry Trends

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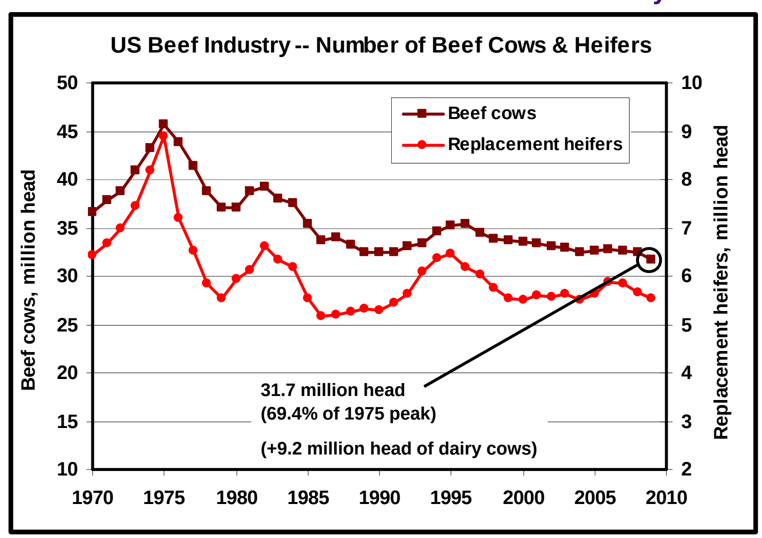
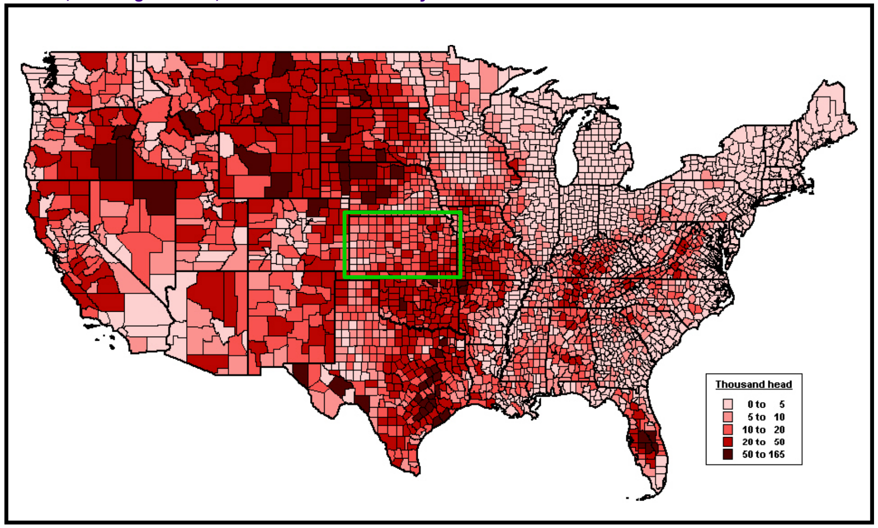
Cow inventory

U.S. beef cow numbers are at lowest level in over 30 years…



Location of cows

Average beef cow inventory (33.25 million), 2000-2004 Source: USDA NASS, 2002 Ag Census, Kansas State University



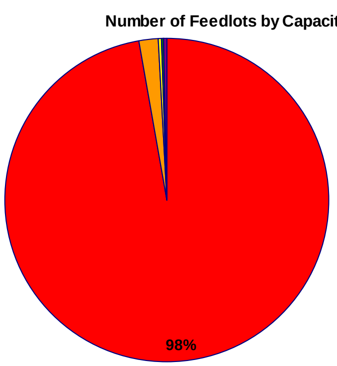
Average herd size and distribution

Average beef cow herd size increased from 37.3 in 1993 to 42.1 in 2009, but averages can be somewhat deceiving…

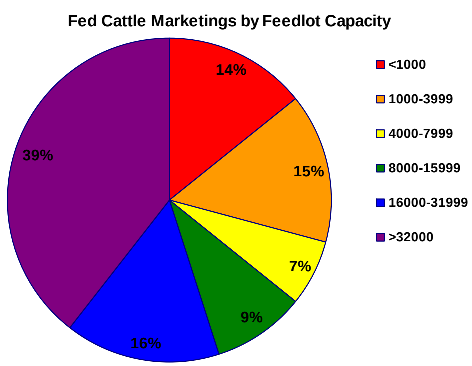
Farm size	Percent of operations		Percent of inventory	
(cows/farm)	1993	2009	1993	2009
1-49	80.7	79.4	31.7	28.3
50-99	11.3	10.9	19.8	17.1
100-499	7.4	8.9	33.9	38.0
500+	0.6	0.8	14.6	16.6

Roughly 10% of the operations control over 50% of the cows (diverse cow-calf sector)

Vast majority of feedlots are small, but they account for a relatively small share of total marketings…

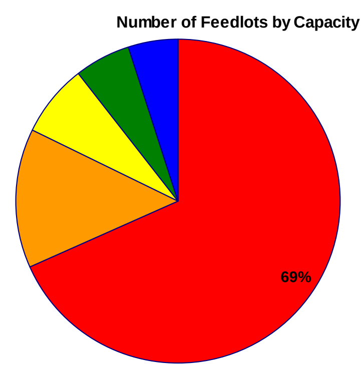


Total (2005-09 avg) = 85,891 feedlots

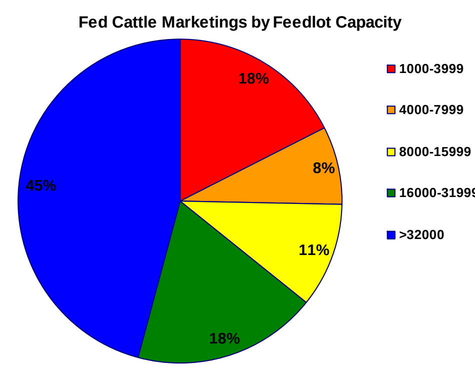


Total (2005-09 avg) = 28,408,000 head

1000+ head feedlots represent 2.9% of all feedlots in U.S., but account for 85.8% of fed cattle marketings…



Total (2005-09 avg) = 2,491 feedlots



Total (2005-09 avg) = 24,369,000 head

Concentration of U.S. animal agriculture in 2009

(production from approximately 10% of operations)

	Size of operation (hd)	Percent of operations	% of I, M, or P*
Beef cows	100+	9.7%	54.6% (I)
1000+ head Feedlots**	24,000+	8.5%	61.6% (M)
Dairy	200+	11.1%	72.0% (P)
Swine	2,000+	11.5%	86.0% (I)

* I = Inventory, M = Marketings, P = Production

** Feedlots with 1000+ hd represent 2.6% of all feedlots and account for 84.7% of marketings

Source: USDA NASS and K-State

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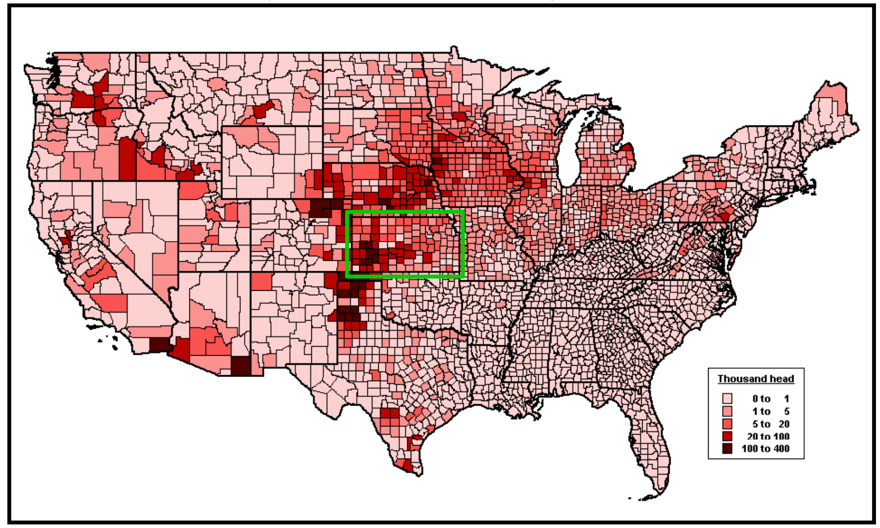
Average cattle on feed (13.3 million), 2000-2004

Source: USDA NASS, 2002 Ag Census, Kansas State University



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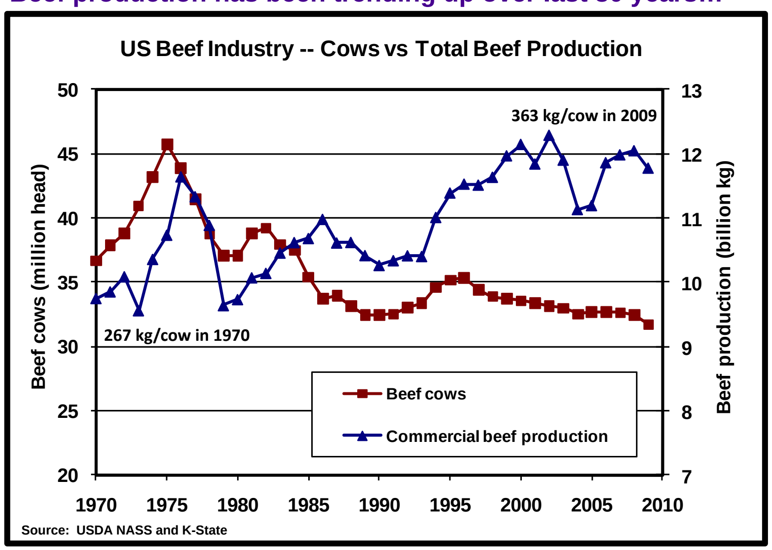
Beef production has been trending up over last 30 years…



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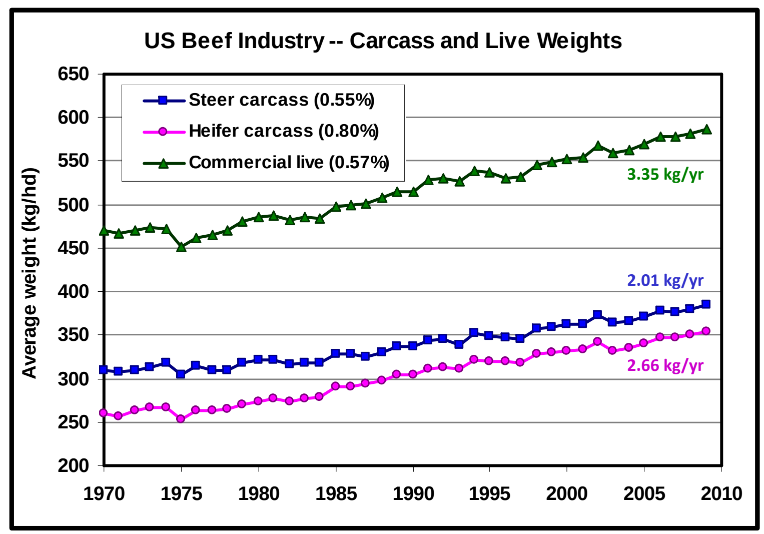
Cattle are being finished at heavier weights…



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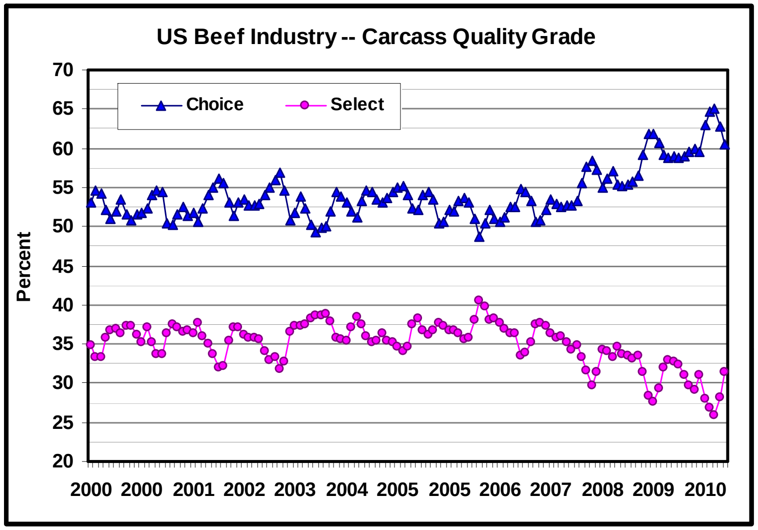
Quality of carcasses has been improving…



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US Beef Demand, 1980-2009

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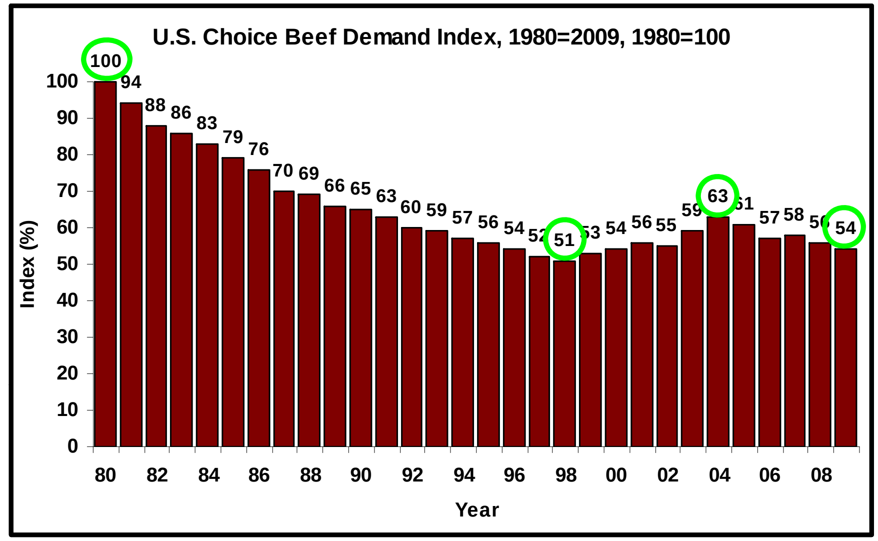

Source: T. Schroeder, Kansas State University (http://naiber.org/beefdemandindex.html)

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Cattle Price Trends

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Feeder Cattle Futures Price

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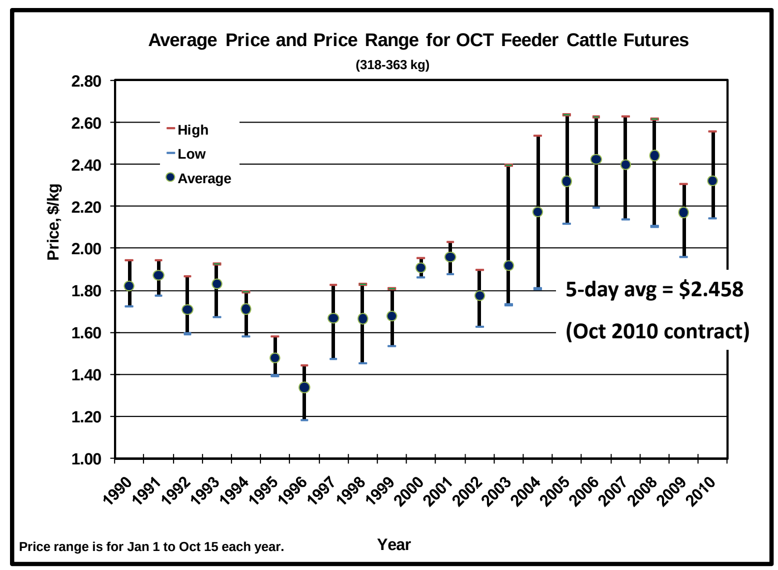

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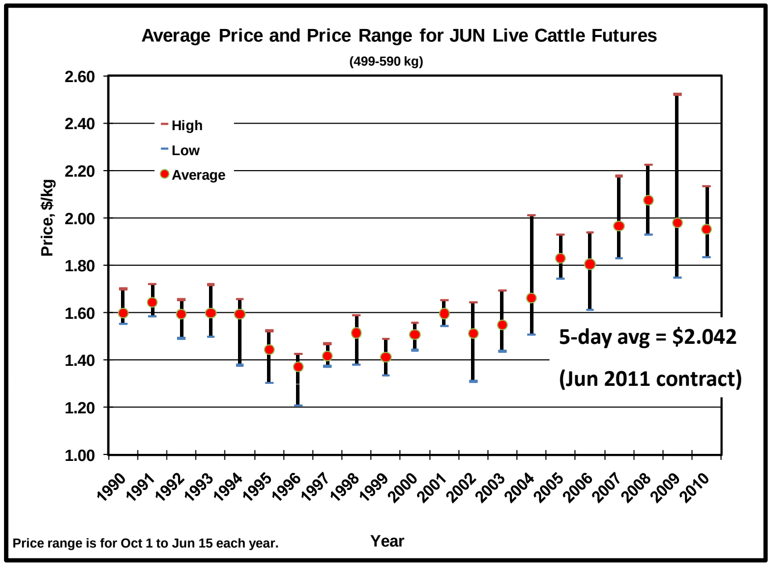
Live Cattle Futures Price



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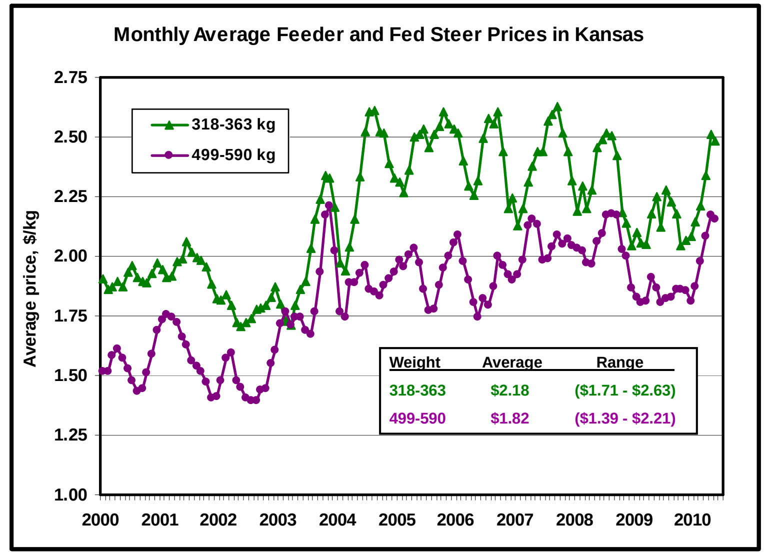
Feeder and Fed Cattle Cash Prices



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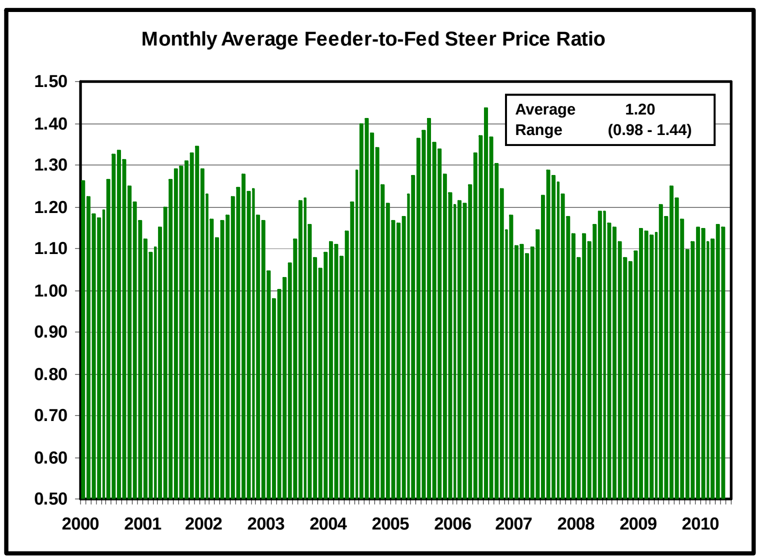
Feeder and Fed Cattle Cash Prices



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Input Prices and Returns

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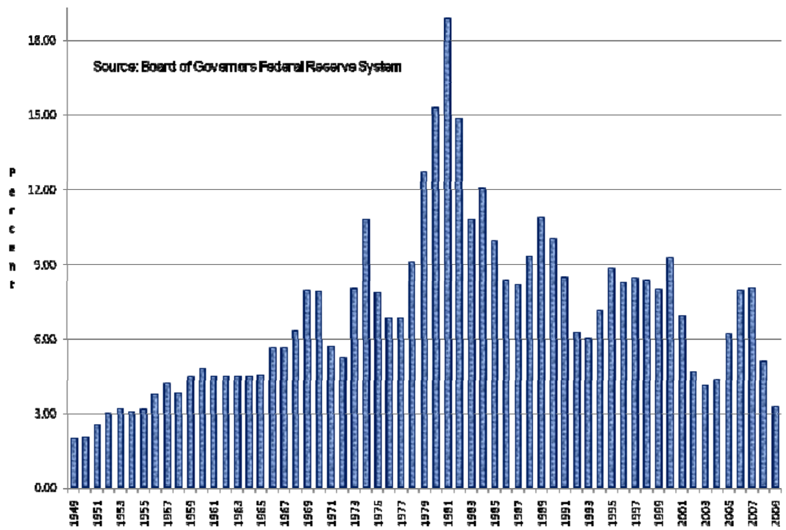
Prime Interest Rate



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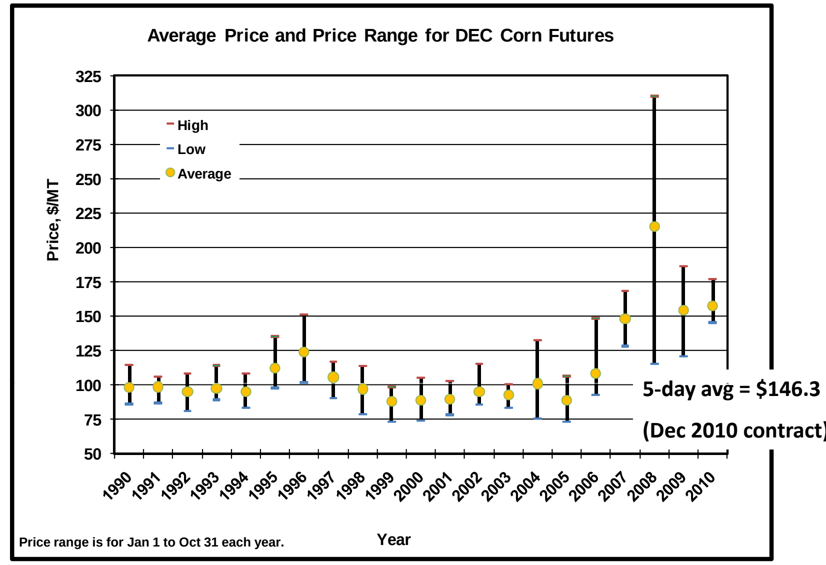
Corn Futures Price



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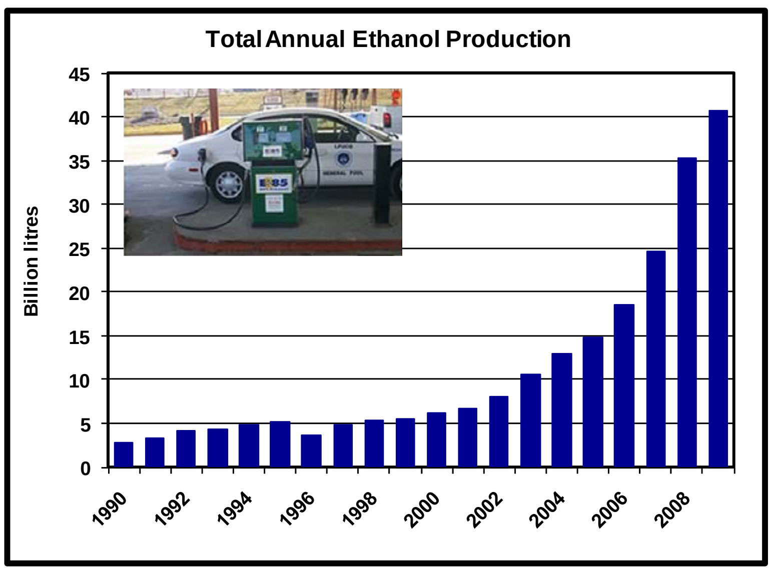

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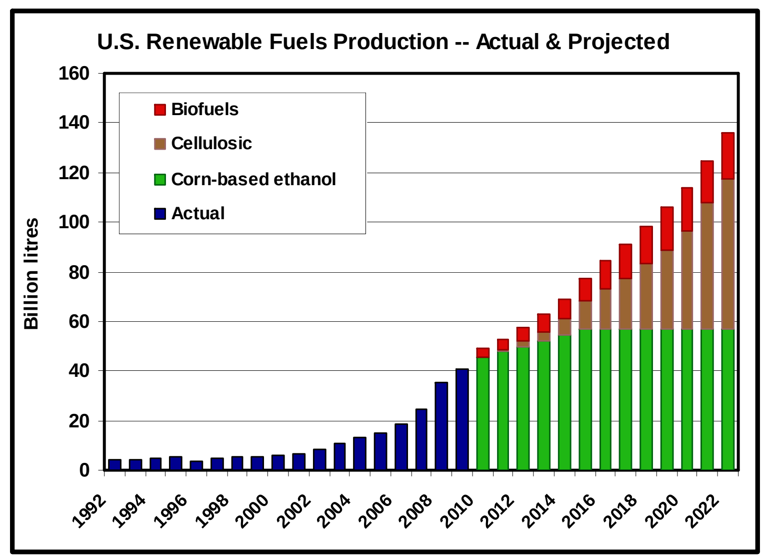
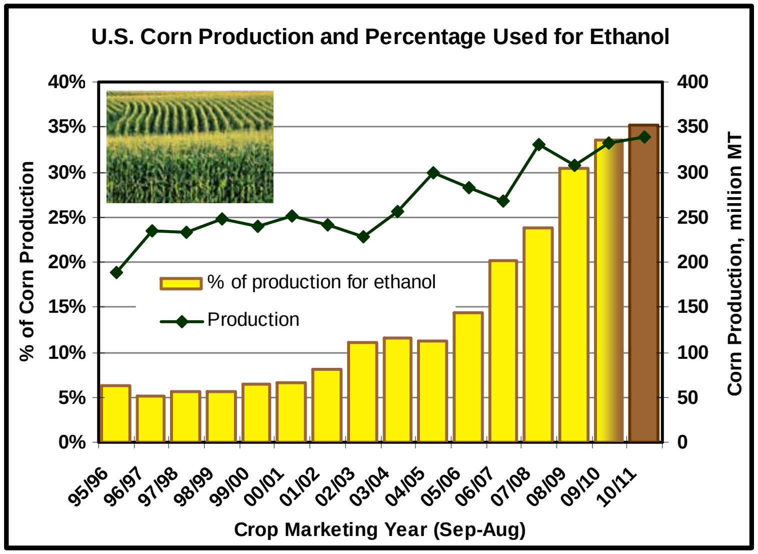
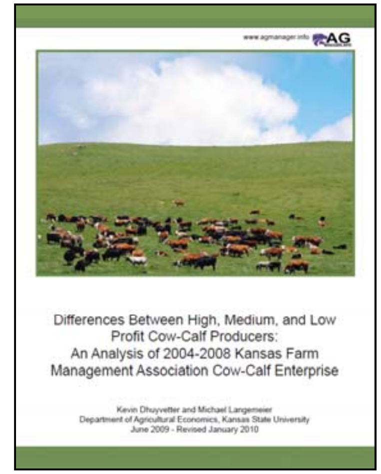


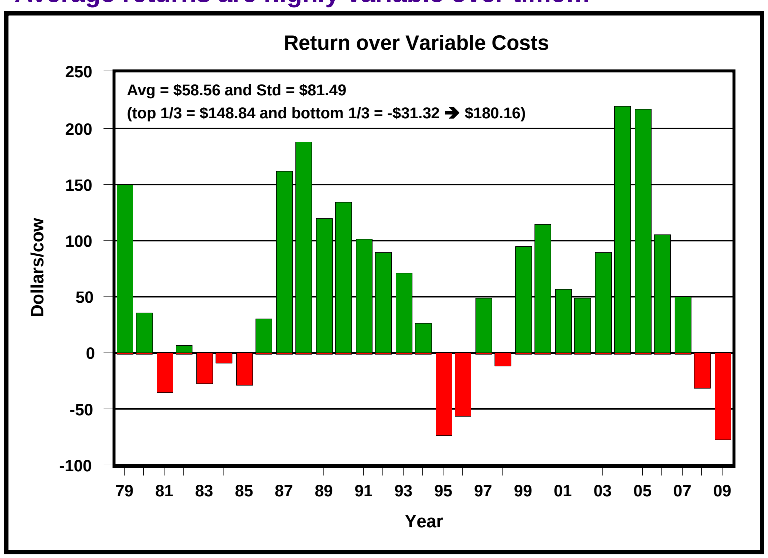


Cow-Calf Profitability Drivers

- Analysis of KFMA cow-calf enterprise analysis returns
  - 1979-2008 all operations (examine time effect)
  - 2004-2008 operations with at least three years of data (examine producer effect)
- Paper available on web (www.agmanager.info)



Average returns are highly variable over time…



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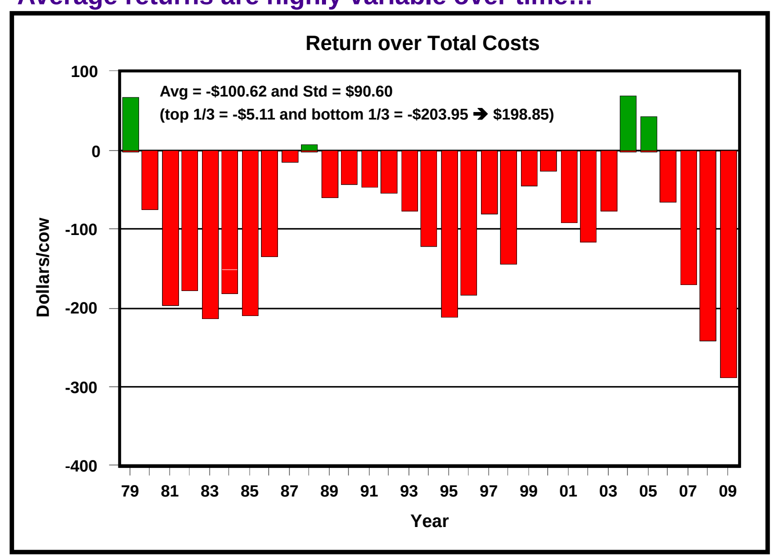
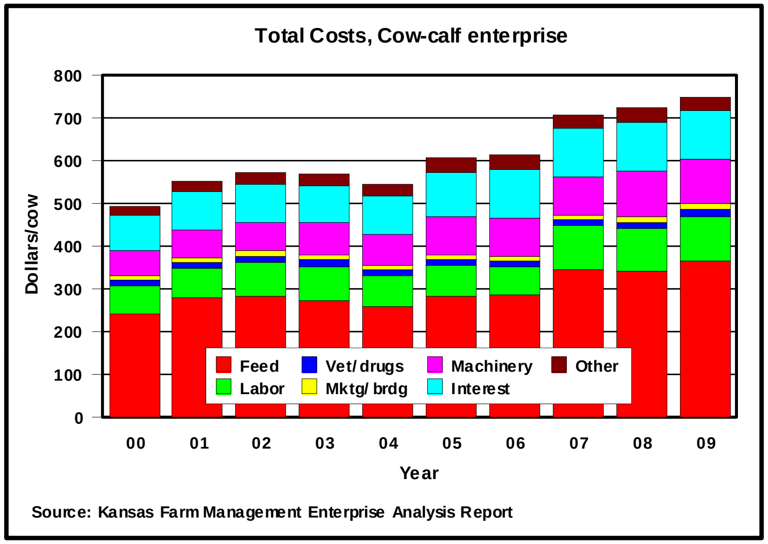


Cow-Calf Costs

Costs increased significantly in last three years…



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Cow-Calf Returns

However, returns are more variable across producers…

Beef Cow-calf Enterprise, 2004-2008 (min of 3 years)*

	All Farms	Profit Category: High 1/3 Head / $	Profit Category: Mid 1/3 Head / $	Profit Category: Low 1/3 Head / $	Difference between High 1/3 and Low 1/3: Absolute	Difference between High 1/3 and Low 1/3: %
Number of Farms	65	22	21	22		
Labor allocated to livestock, %	38.1	48.0	35.4	30.7		
Number of Cows in Herd	124	170	137	65	105	161%
Number of Calves Sold	114	156	129	58	97	168%
Weight of Calves Sold	583	591	584	573	18	3%
Calf Sales Price / Cwt	$109.12	$108.73	$109.99	$108.68	$0.05	0%
Gross Income	**$539.29**	**$573.90**	**$555.38**	**$489.33**	**$84.56**	**17%**
Feed	$312.02	$274.36	$316.05	$345.83	-$71.47	-21%
Interest	$117.00	$94.09	$117.00	$139.90	-$45.81	-33%
Vet Medicine / Drugs	$15.70	$15.85	$15.73	$15.54	$0.30	2%
Livestock Marketing / Breeding	$10.08	$8.15	$11.44	$10.72	-$2.56	-24%
Depreciation	$37.23	$26.36	$25.28	$59.51	-$33.16	-56%
Machinery	$66.73	$47.71	$63.34	$88.99	-$41.28	-46%
Labor	$92.87	$69.48	$84.90	$123.88	-$54.41	-44%
Other	$39.85	$22.85	$35.10	$61.38	-$38.53	-63%
Total Cost	**$691.49**	**$558.84**	**$668.84**	**$845.75**	**-$286.91**	**-34%**
Net Return to Management	**-$152.20**	**$15.05**	**-$113.46**	**-$356.42**	**$371.47**	

22.8%

77.2%

* Sorted by Net Return to Management (Returns over Total Costs) per Cow

Compared to $180-$200 between top and bottom third years.

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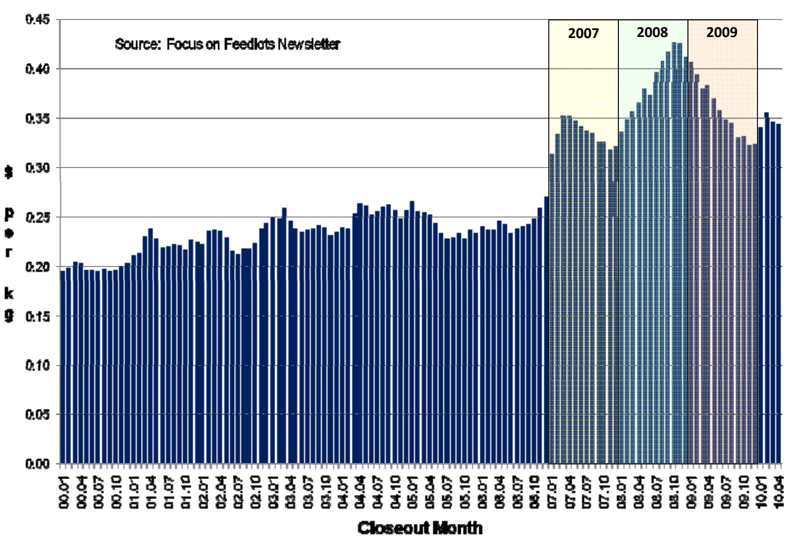
Feeding Cost of Gain for Steers



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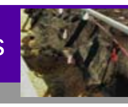
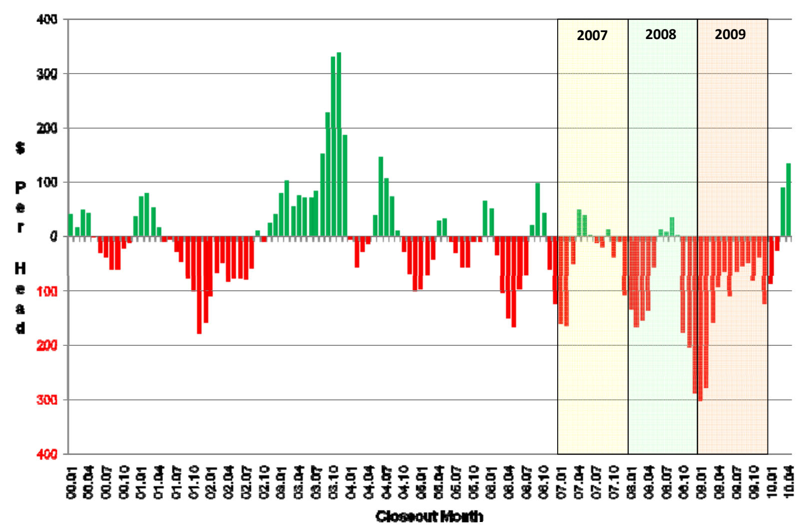
Returns to Finishing Steers

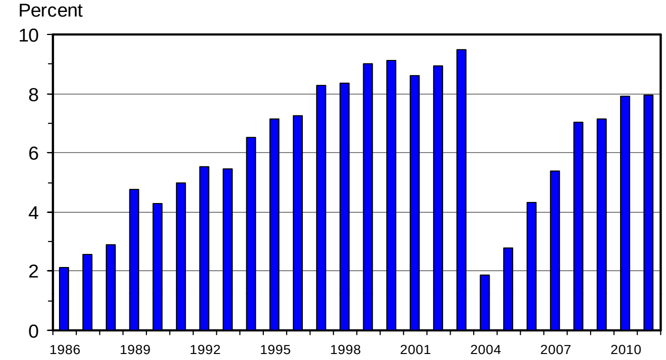




Trade and Other Issues

U.S. BEEF AND VEAL EXPORTS

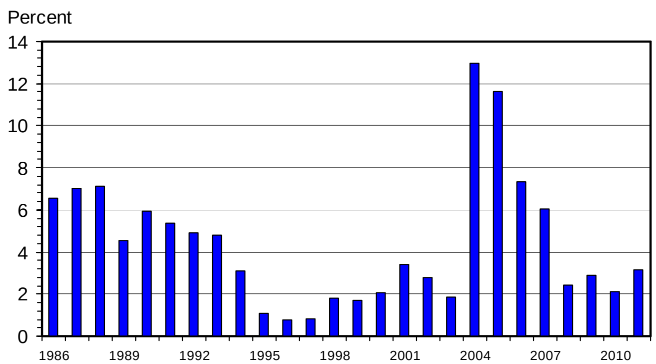
As a Percentage of Production, Carcass Weight, Annual



Data Source: USDA-ERS & FAS; Compiled & Forecasts by LMIC

U.S. BEEF AND VEAL NET IMPORTS

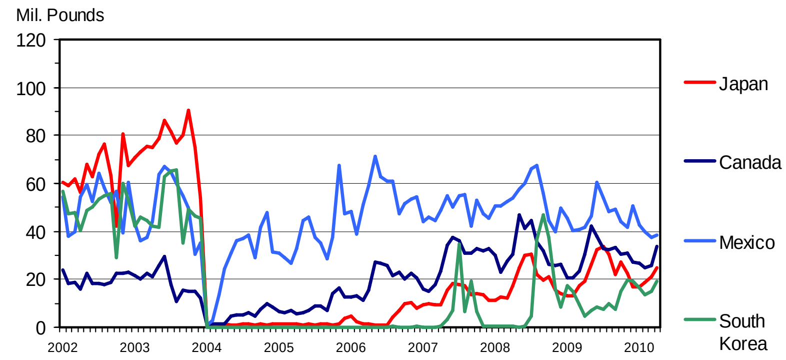
As a Percentage of Production, Carcass Weight, Annual



Data Source: USDA-ERS & FAS; Compiled & Forecasts by LMIC

U.S. BEEF EXPORTS TO MAJOR MARKETS

Carcass Weight, Monthly



Data Source: USDA-ERS & USDA-FAS, Compiled by LMIC

Bovine Spongiform Encephalopathy Status of Members

According to **RESOLUTION No. 18**
(78th General Session May 2010)

=>Negligible BSE risk

Members recognised as having a **negligible BSE risk** in accordance with Chapter 11.6 . of the *Terrestrial Code* :

Argentina	India	Peru
Australia	New Zealand	Singapore
Chile	Norway	Sweden
Finland	Paraguay	Uruguay
Iceland		

=>Controlled BSE risk

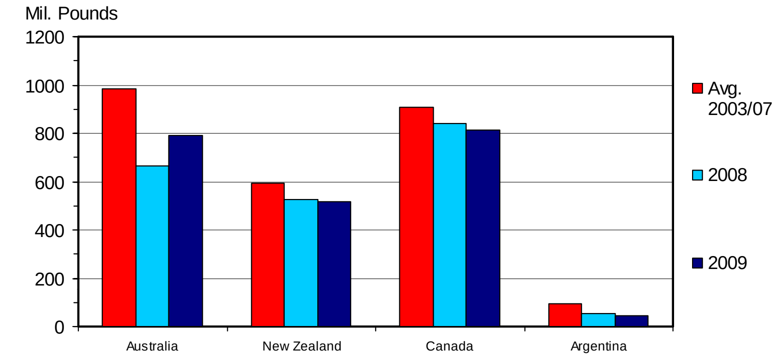
Members recognised as having a **controlled BSE risk** in accordance with Chapter 11.6. of the *Terrestrial Code* :

Austria	Greece	Mexico
Belgium	Hungary	Netherlands
Brazil	Ireland	Panama
Canada	Italy	Poland
Chinese Taipei	Japan	Portugal
Colombia	Korea (Rep. of)	Slovak Republic
Cyprus	Latvia	Slovenia
Czech Republic	Lichtenstein	Spain
Denmark	Lithuania	Switzerland
Estonia	Luxembourg	United Kingdom
France	Malta	United States of America
Germany		

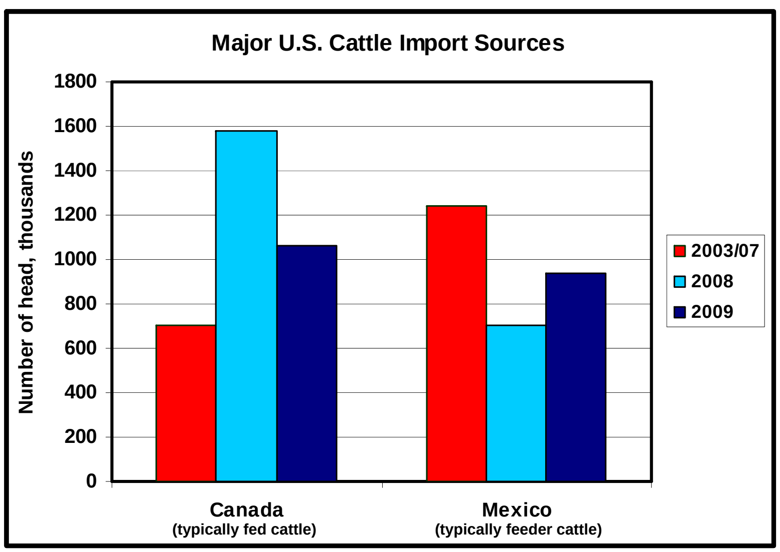
Source: http://www.oie.int/eng/Status/BSE/en_BSE_free.htm

MAJOR U.S. BEEF IMPORT SOURCES

Carcass Weight, Annual



Data Source: USDA-ERS & FAS; Compiled by LMIC



Data Source: USDA-ERS & FAS

MCOOL Impacts: Possible Responses/Retaliations

- **Dec. 2008 – Canada & Mexico initiated WTO dispute settlement process**
  - **Cannot end MCOOL, but can allow imposition of "sanctions of equal measure against the U.S."**
- **Canada & Mexico are 1st and 3rd largest current export markets**
  - **In 2002, Canada was leading export market for 30 U.S. states**

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Cattle Identification and Traceability

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Comparison of Cattle Population and Identification and Traceability Systems.

Country	Cattle Population (1,000 hd)[1]	Premises ID[2]	Individual Cattle ID[2]	Group / Lot Cattle ID[2]	Electronic Cattle ID[2]	Record Animal Movement[2]	Retire Animal Number[2]
Australia	28,560	M	M	V	M	M	M
Botswana	3,100	V	M	NA	M	M	V
Brazil	207,157	M	V	M	V	M	V
Canada	14,830	V	M	NA	M	V	M
European Union	90,355	M	M	V	V	M	M
Japan	4,391	M	M	V	V	M	M
Mexico	28,648	V	V	V	V	V	V
Namibia	2,384	M	M	V	V	M	M
New Zealand*	9,652	V	V	V	V	V	V
South Korea*	2,484	M	M	V	V	M	M
Uruguay	11,956	M	M	V	M	M	M
United States*	96,702	V	V	V	V	V	V
World	1,383,157						

[1]All numbers are for cattle populations in 2006 as reported by the Food and Agriculture Organization of the United Nations (FAOSTAT, 2008).

[2] M = Mandatory, V = Voluntary, NA = Not Allowed

* Indicates a voluntary program. The requirements listed are for those who choose to participate

Source: Bowling et al. (2008). Reproduced with permission from Editor-in-Chief, *Professional Animal Scientist*.

Competing export countries

Major importing countries

Source: NAIS Benefit-Cost Analysis Study Results

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Summary

- **Industry continues to consolidate at all levels**
  - **Cow-calf at a slower rate than other livestock sectors**
  - **Cow-calf sector likely will remain extremely diverse due to resource variability (also quite polarized regarding policy)**
- **Cattle markets**
  - **Relatively strong last 5 years, but increased volatility and higher prices have not necessarily resulted in higher returns**
- **Continuing weakening of beef demand is a concern**
  - **More efforts at differentiating product and trying to capture what consumer wants**
- **Energy / environment policy is a concern**
  (i.e., unintended consequences that impact beef industry)

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Looking forward…

The two generic strategies of producers are production differentiation and cost leadership.

- **U.S. (and world) economy?**
- **Consumer response to**
  - **Food safety (traceability, animal ID)?**
  - **Nutritional information and convenience?**
  - **Social issues – e.g., sustainability, carbon footprint, animal welfare, local foods, etc?**
- **Energy policy?**
  - **Impact on corn, hay, and forage prices**
- **Export markets?**

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Questions?

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