

The Power of Benchmarking

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Outline of Presentation

- Benchmarking
- Competitive Advantage
- Resource-Based Framework
- Whole-Farm Analysis
- Enterprise Analysis
 - Cow-Calf Enterprise
 - Backgrounding
 - Finishing

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What is Benchmarking?

- Benchmarking is a process that can be used to identify and implement internal and external best practices.
- Benchmarking can be used as an early warning signal of organizational deficiencies.
- Benchmarking is an important component to a continuous improvement program.

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Benchmarking

- Steps:
 - determine what to benchmark
 - form a benchmarking team
 - identify benchmarking targets
 - collect and analyze information and data
 - take action

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Internal Benchmarking

- Involves an internal examination of a firm's performance.
- Helps to identify bottlenecks to profitability.
- Benefits:
 - Establishes baseline of acceptable performance.
 - Identifies gaps in existing performance.

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External Benchmarking

- Competitive Benchmarking
 - Compare performance to that of primary competitors.
- Industry Benchmarking
 - Compare performance to that of other firms in an industry
- Best-in-Class Benchmarking
 - Used to identify best practices across a wide variety of industry settings.
 - Usually focuses on one business area such as accounts receivable, personnel management, or input purchasing.

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Competitive Advantage

- Why Study Strategy?
 - Firms need to:
 - Respond rapidly to competitive and market changes.
 - Benchmark continuously to achieve best practice.
 - Establish a few core competencies in the race to stay ahead of rivals.

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Competitive Advantage

- Why Study Strategy?
 - A company can outperform rivals only if it can establish a difference than it can preserve.
 - Firms must deliver greater value to customers or create comparable value at a lower cost, or both.
 - Delivering greater value allows the firm to charge higher average unit prices.
 - Greater efficiency results in lower average unit costs.

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Competitive Advantage

- Why Study Strategy?
 - Finding New Positions: The Entrepreneurial Edge
 - New positions open because of change.
 - New Technologies
 - » Information
 - » Equipment
 - Market Structure
 - Consumption Patterns

Competitive Advantage

- Position and Dynamics
 - Position
 - Overall cost leadership
 - Differentiation
 - Dynamics
 - Refers to how a firm accumulates resources and capabilities, as well as to how it adjusts over time to changing circumstances.

Competitive Advantage

		Relative Price Per-Unit		
		Lower	Average	Higher
Relative Cost Per-Unit	Lower	1 Indeterminate Position	2 Competitive Advantage	3 Competitive Advantage
	Average	4 Competitive Disadvantage	5 Parity Position	6 Competitive Advantage
	Higher	7 Competitive Disadvantage	8 Competitive Disadvantage	9 Indeterminate Position

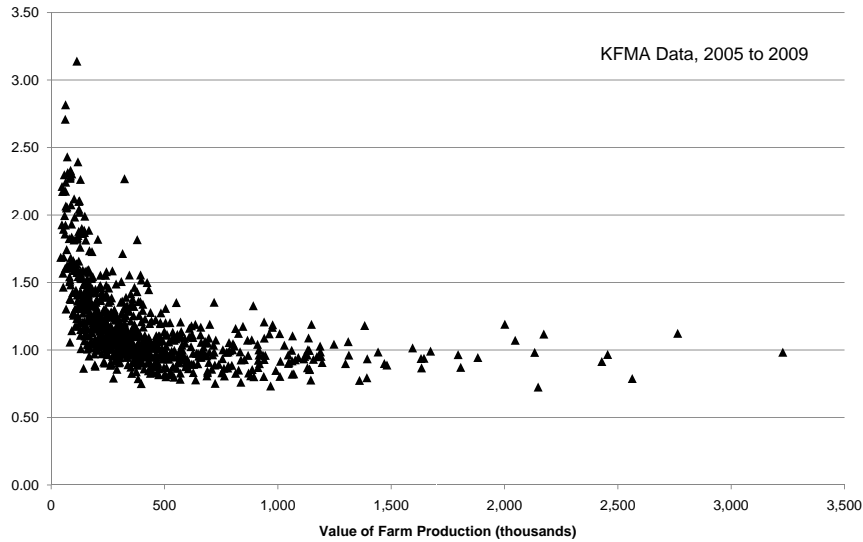
Hunt, 2000

Competitive Advantage 1988-2007 KFMA Data

Variable	Above Average (30% of farms)	Average (42% of farms)	Below Average (28% of farms)
Value of Farm Production	332,709	211,173	109,601
Operating Profit Margin Ratio	0.212	0.136	-0.024
Asset Turnover Ratio	0.338	0.263	0.169
Cost Efficiency	0.696	0.589	0.453

Source: Yeager and Langemeier (2009)

Economic Total Expense Ratio



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Resource Based Framework

- The **resource based theory of firm** focuses on the resources that contribute to a firm's **competitive advantage**.
- This framework involves asking four questions related to:
 - Value
 - Rareness
 - Imitation
 - Organization

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Resource Based Framework Is a Resource or Capability ...

Valuable?	Rare?	Costly to Imitate?	Exploited by Organization?	Competitive Implications	Economic Performance
No	No	No	No	Disadvantage	Below Normal
Yes	No	No	No	Parity	Normal
Yes	Yes	No	No	Temporary Advantage	Above Normal
Yes	Yes	Yes	Yes	Sustained Advantage	Above Normal

Adapted using information in Chapter 3 of Barney and Clark (2007).

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Whole-Farm Analysis

- How do we measure profit?
- Profit measures?
 - Net Cash Flow
 - Does not account for inventory changes.
 - Does not account for opportunity charges.
 - Net Farm Income
 - Difficult to compare across firms.
 - Depends on scale of operation.

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Whole-Farm Analysis

- Firm Objective
 - Maximize economic profit.
 - Two components of profit:
 - Accrual gross revenue
 - Economic cost
 - All decisions need to be examined by considering the resulting impacts on marginal (incremental) revenue and marginal (incremental) cost.

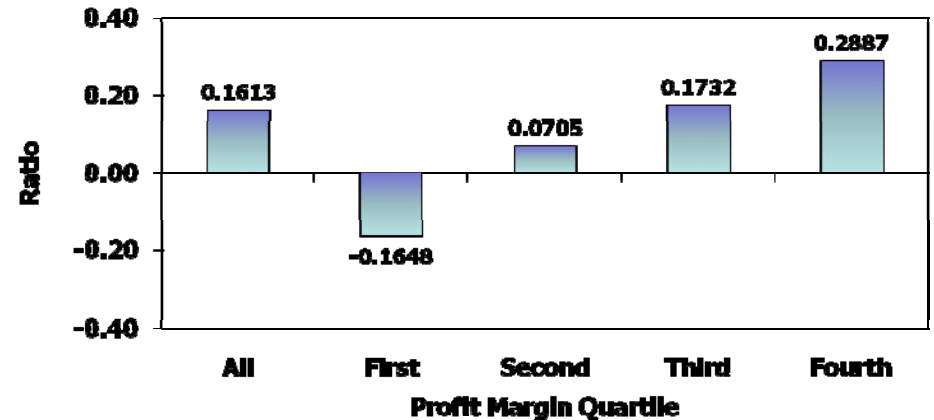
Measuring Profitability

- Even a business that is both liquid and solvent will not necessarily be profitable
- Financial and economic measures can be used to examine profitability
- Profitability can be measured in relation to income, assets, or equity
- Slides below use information from the Kansas Farm Management Association (KFMA)

Profitability KFMA, 2005-2009

- Operating Profit Margin Ratio
 - $(\text{Net Farm Income} + \text{Interest} - \text{Unpaid Labor}) / (\text{Value of Farm Production})$
 - Average:
 - $(91,276 + 20,403 - 48,853) / (389,428) = 0.1613$
 - Benchmark:
 - **0.2887**

Profit Margin Ratio KFMA, 2005-2009



Profitability KFMA, 2005-2009

- Rate of Return on Farm Assets
 - $(\text{Net Farm Income from Operations} + \text{Interest Expense} - \text{Unpaid Labor}) / (\text{Average Total Assets})$
 - Example:
 - $(91,276 + 20,403 - 48,853) / (1,179,111) = 0.0533$
 - Benchmark:
 - **0.0999**

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Profitability KFMA, 2005-2009

- Rate of Return on Farm Equity
 - $(\text{Net Farm Income from Operations} - \text{Unpaid Labor}) / (\text{Average Equity})$
 - Example:
 - $(91,276 - 48,853) / (844,494) = 0.0502$
 - Benchmark:
 - **0.1136**

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Profitability

- When the return on assets is greater than the interest rate, profits will increase and equity will grow.
 - $(\text{ROE} > \text{ROA})$.
- When the return on assets is less than the interest rate, return on equity is decreased by using leverage, and can even be negative.
 - $(\text{ROE} < \text{ROA})$.

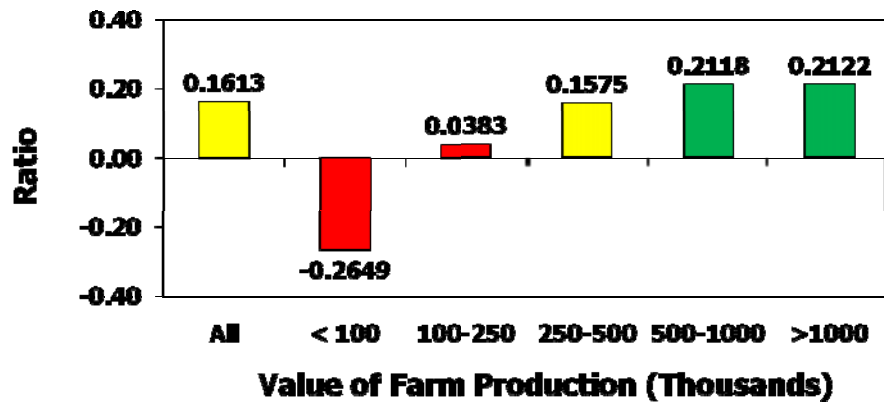
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Financial Scorecard

- The charts pertaining to the profit margin by farm size and farm type below use a financial scorecard.
 - Red Light: Low Performance (Vulnerable)
 - Yellow Light: Medium Performance
 - Green Light: Good Performance (Strong)
- Note: The ranges for good performance are not the same as those used for the benchmarks above.

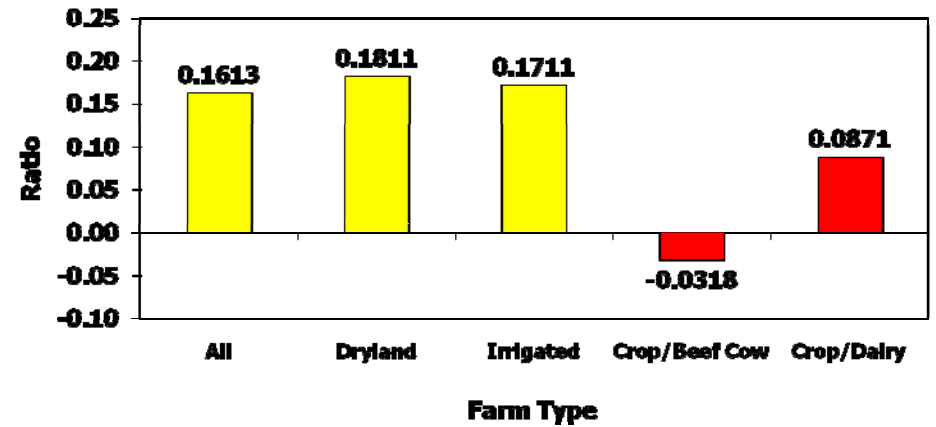
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Profit Margin Ratio KFMA, 2005-2009



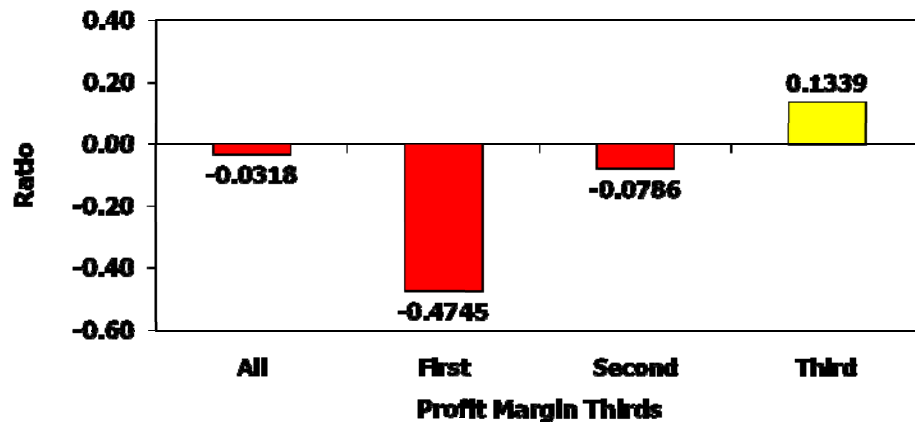
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Profit Margin Ratio KFMA, 2005-2009



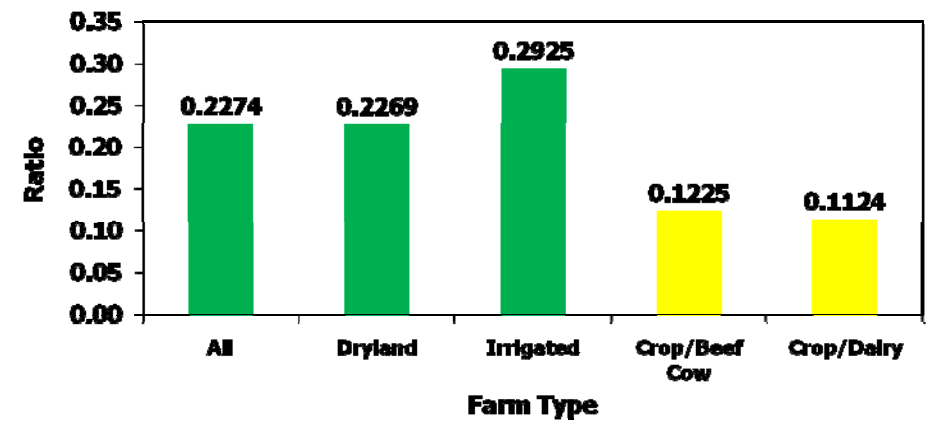
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Profit Margin Ratio: Crop/Beef Cow Farms KFMA, 2005-2009

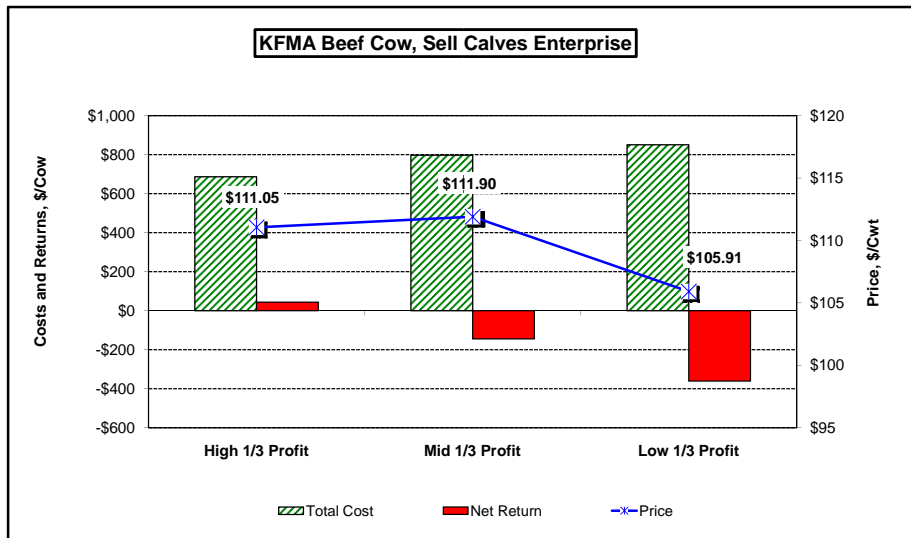


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Profit Margin Ratio KFMA, 2010



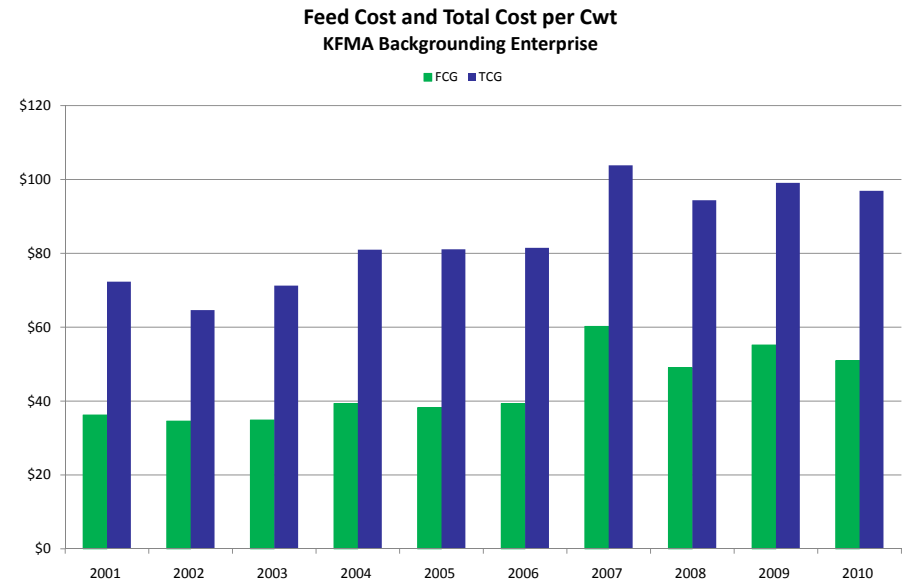
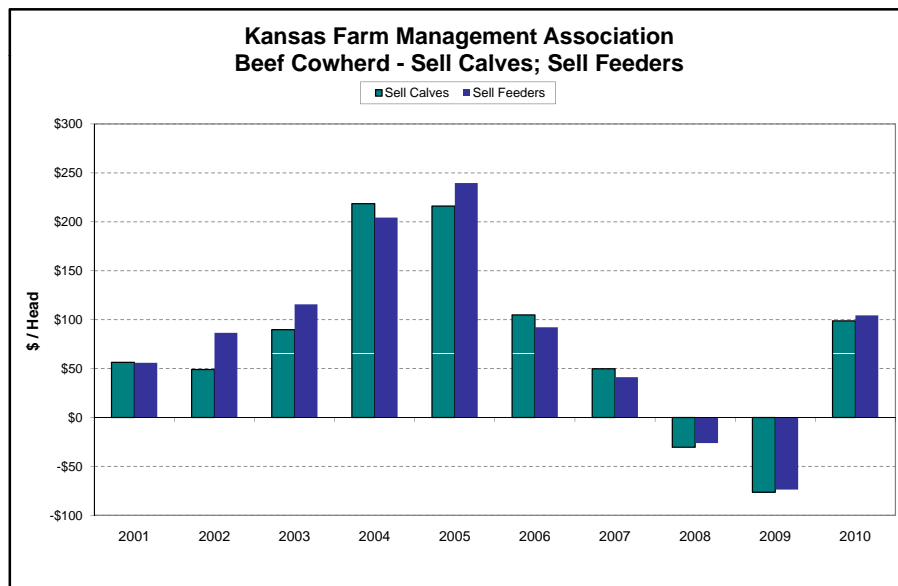
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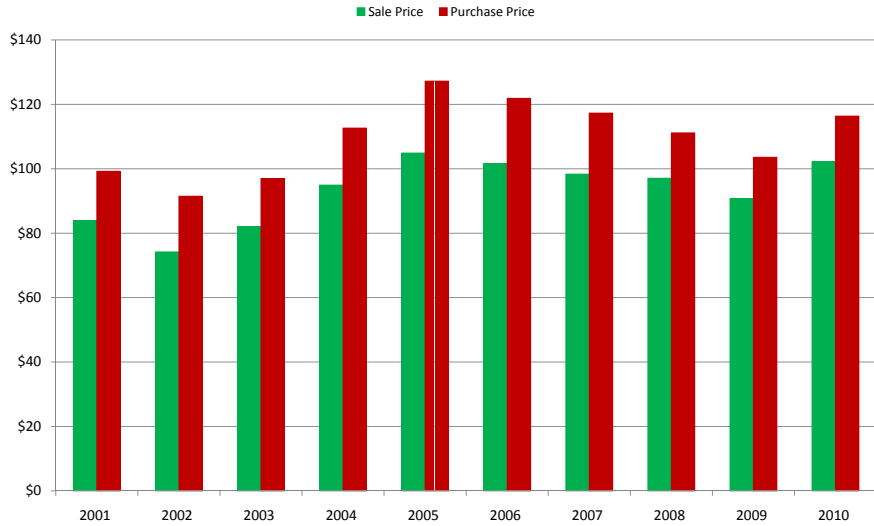
Kansas Farm Management Association: State Averages

2010 Beef Cow, Sell Calves Enterprise Sorted by Net Return to Management per Cow

	Profit Category			Difference between	
	High 1/3	Mid 1/3	Low 1/3	High 1/3 and Low 1/3	%
Number of Farms	36	36	35		
Number of Cows in Herd	167	124	102	65	64%
Number of Calves Sold	152	104	91	61	67%
Average Weight of Calves Sold	593	571	556	37	7%
Sales Price / Cwt	\$111.05	\$111.90	\$105.91	\$5.14	5%
INCOME PER COW					
Gross Income	\$730.09	\$652.84	\$489.45	\$240.64	49%
COSTS PER COW					
Feed	\$161.03	\$220.29	\$252.70	(\$91.67)	-36%
Pasture	\$161.25	\$150.05	\$154.75	\$6.50	4%
Interest	\$107.75	\$126.09	\$134.38	(\$26.63)	-20%
Vet Medicine / Drugs	\$21.10	\$22.63	\$20.84	\$0.26	1%
Livestock Marketing / Breeding	\$8.89	\$10.13	\$14.44	(\$5.55)	-38%
Depreciation	\$22.69	\$37.00	\$39.19	(\$16.50)	-42%
Machinery	\$62.38	\$73.96	\$79.16	(\$16.78)	-21%
Labor	\$111.78	\$115.57	\$111.75	\$0.03	0%
Other	\$29.91	\$41.61	\$43.33	(\$13.42)	-31%
Total Cost	\$686.78	\$797.33	\$850.54	(\$163.76)	-19%
Net Return to Management / Cow	\$43.31	(\$144.49)	(\$361.09)	\$404.40	

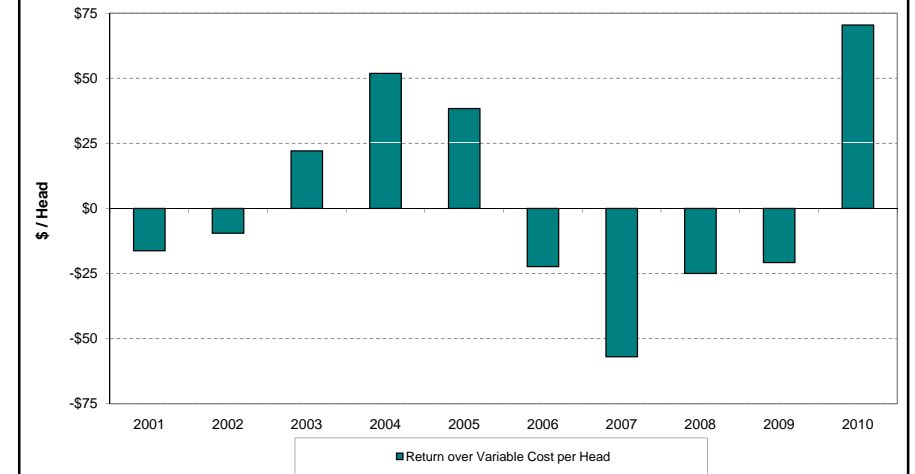


Purchase and Sale Price per Cwt KFMA Backgrounding Enterprise



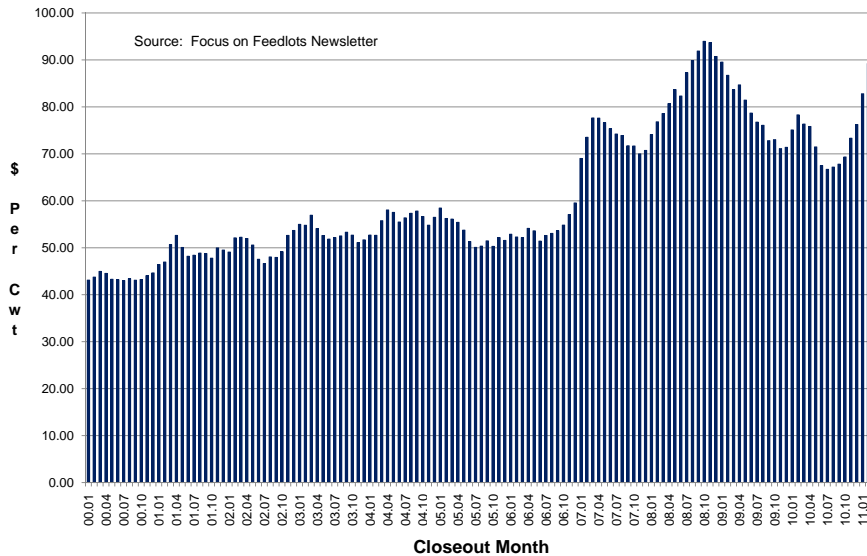
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Kansas Farm Management Association Beef Backgrounding



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Feeding Cost of Gain for Finishing Steers



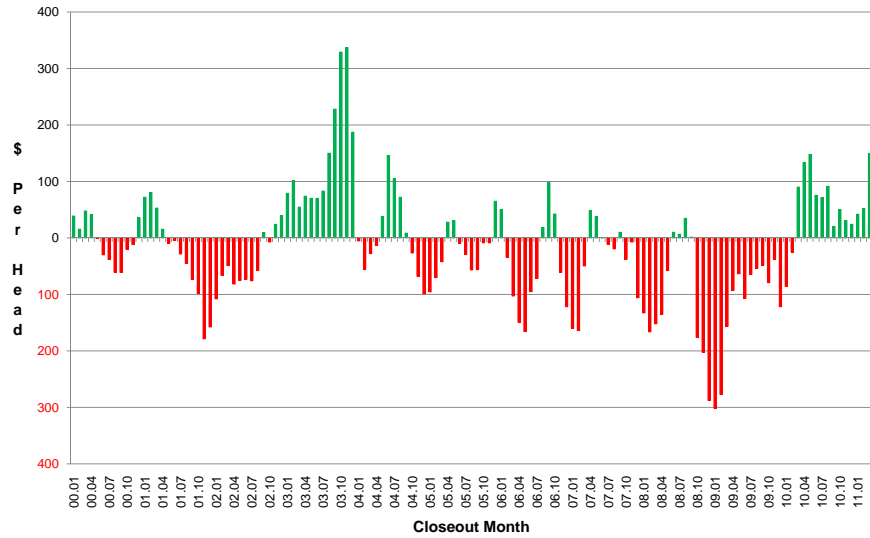
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Factors Impacting Feeding Cost of Gain

Source: KSU Cattle Finishing Return Series	Change Analyzed	Per Cwt Impact
Feed Conversion (Index)	+0.10	\$0.98
Corn Price (\$/bu)	+0.10	\$1.14
Alfalfa Price (\$/ton)	+5.00	\$0.32

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Figure 1. Historical Net Returns for Finishing Steers
 Source: Michael Langemeier, Kansas State University



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 - KFMA newsletter
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