



COSTS OF GRAZING ALTERNATIVES

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Department of Agricultural Economics

K-State Ranching Summit

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Strategic Partnerships

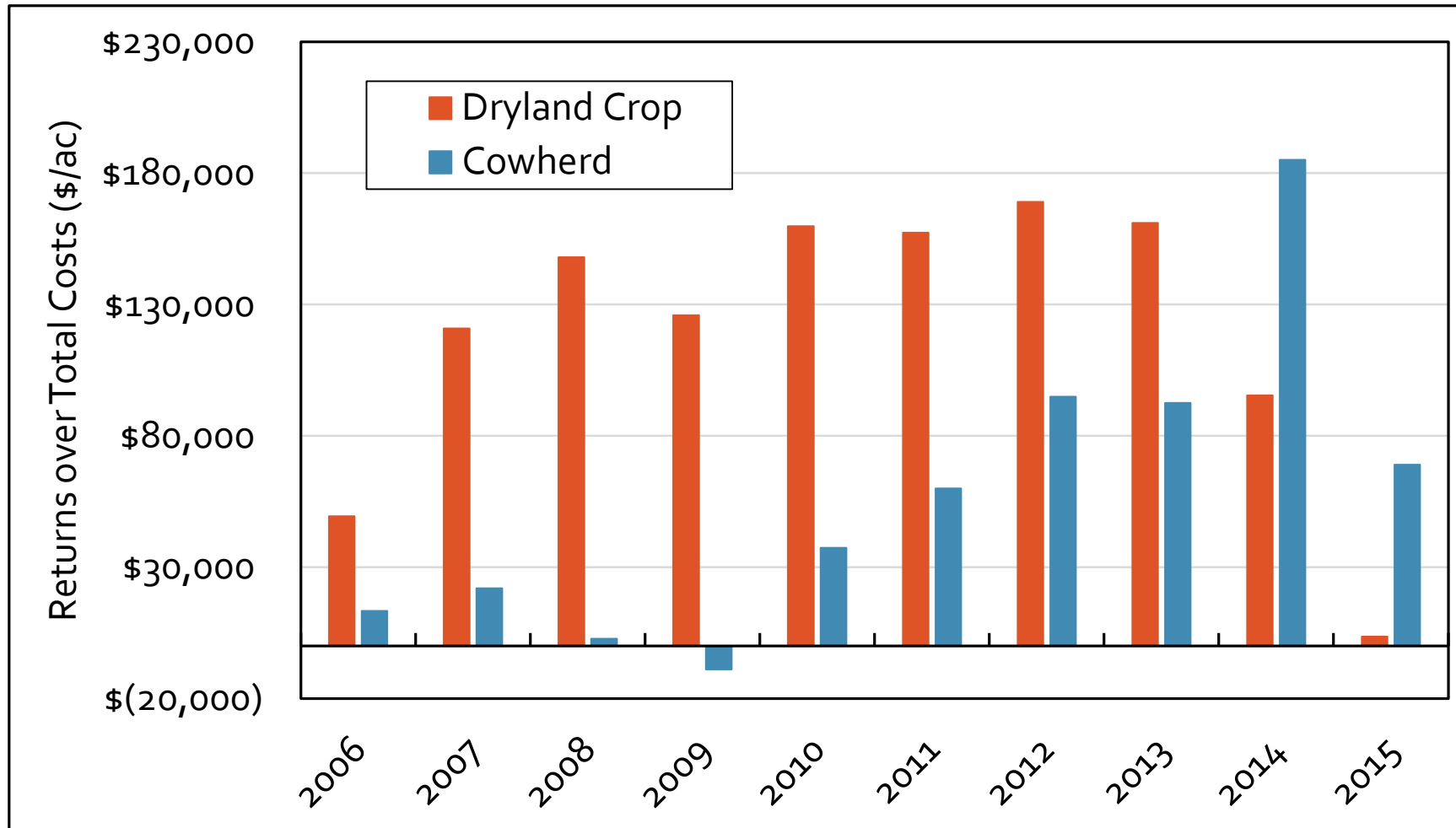
- **Mutually beneficial**

- Improve crop producers bottom line
- Find land for herd expansion

- **Diversification has appeal to crop producers and lenders**

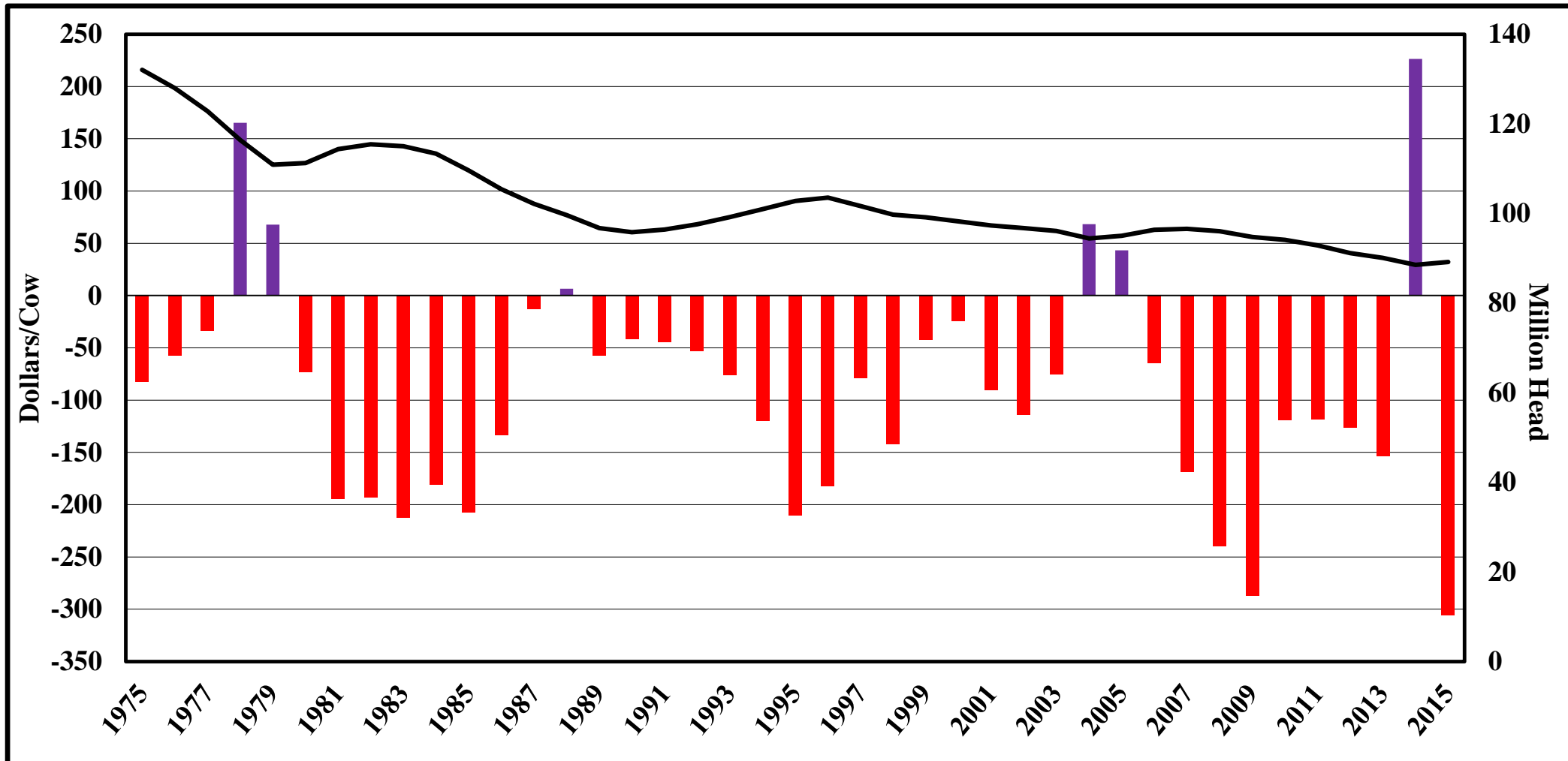
- Alternatives to buying cattle
- Hurdles to capital investment

Net Farm Income by Operation

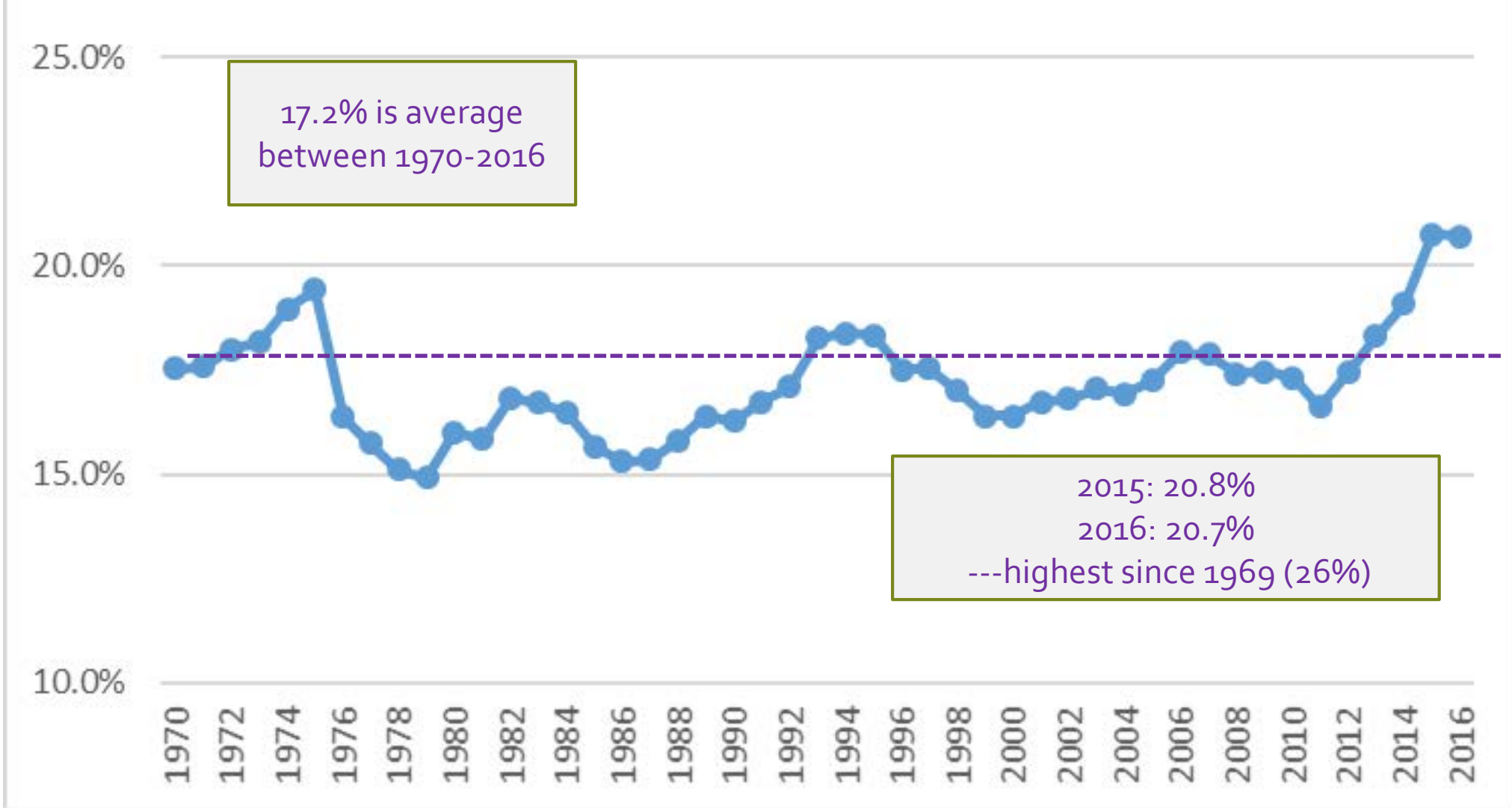


Source: KFMA Executive Reports (<http://www.agmanager.info/kfma>)

Returns over Total Cost & Cattle Inventory



Heifer Retention as % of Total Beef Cows

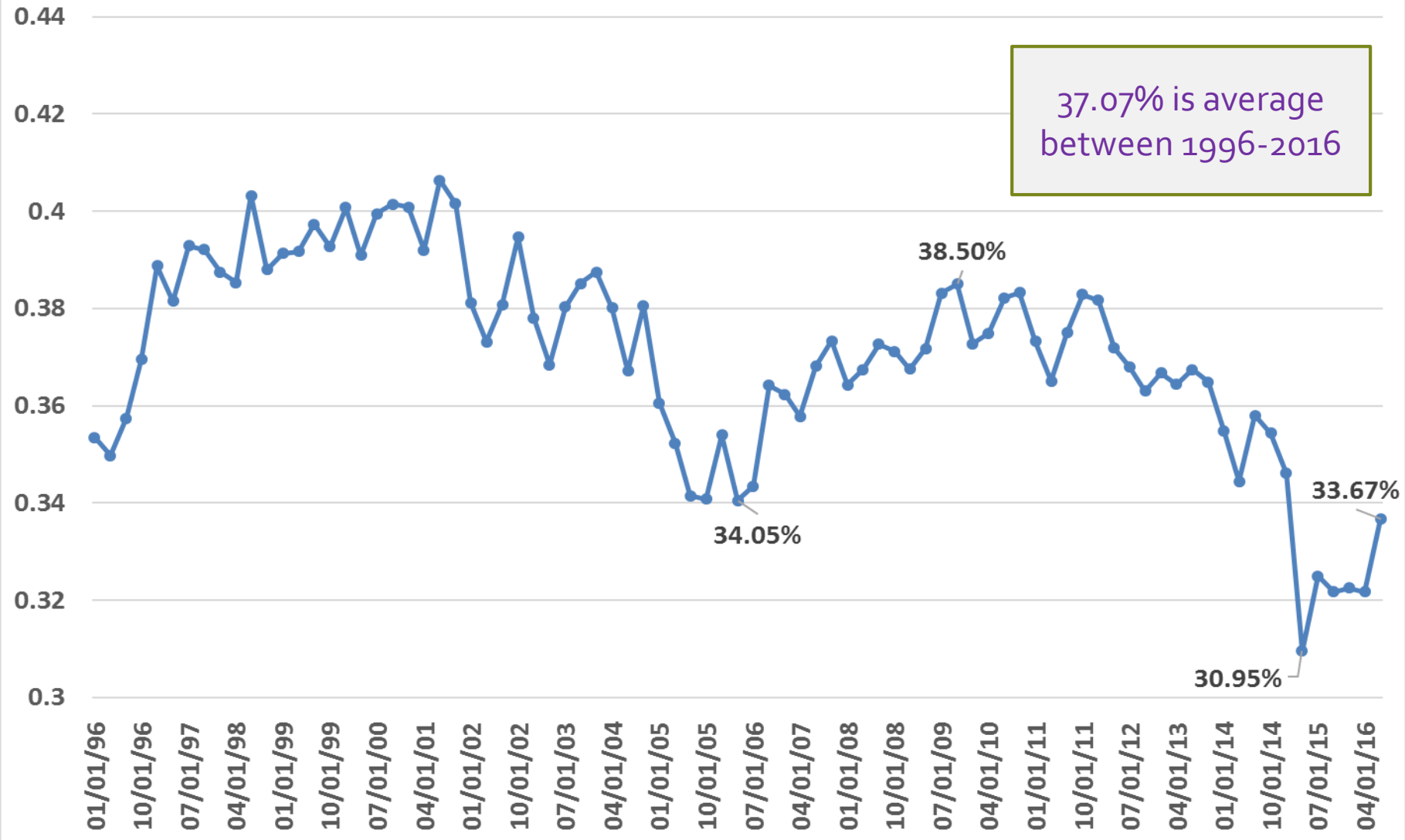


Data Source: USDA-NASS

Livestock Marketing Information Center



COF Quarterly Placements Heifers as % of Total Steers & Heifers



Source: Glynn Tonsor, KSU

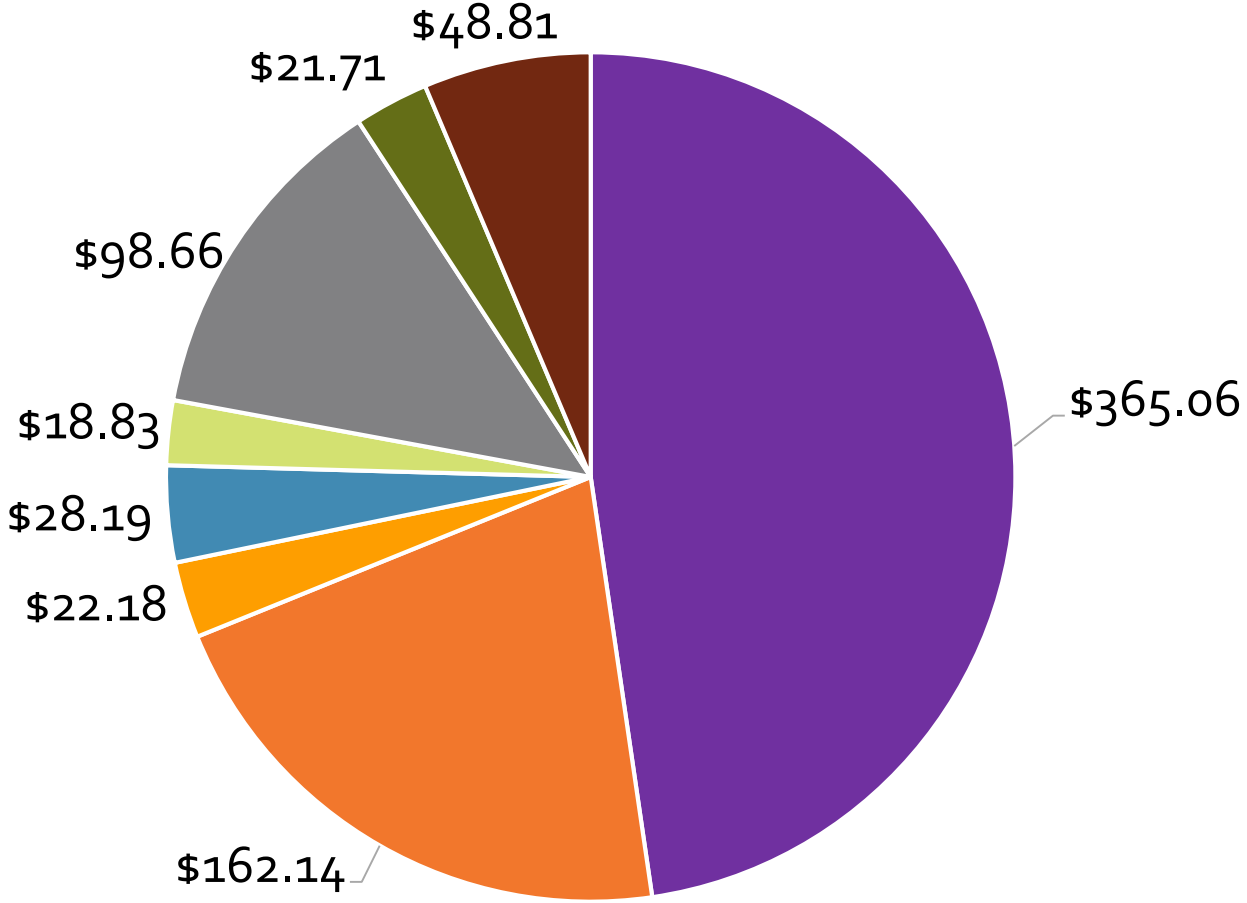


Diversification Strategy

- **Vertical integration**
 - Challenges to borrowing capital
 - Challenges to management skills
- **Strategic partnerships between cattle and crop producers**
 - More efficient use of their owned assets



KFMA Beef Cow-Calf Enterprise Variable Costs, 2011-2015



- Feed
- Pasture
- Interest
- Vet Medicine / Drugs
- Livestock Marketing / Breeding
- Machinery
- Labor
- Other

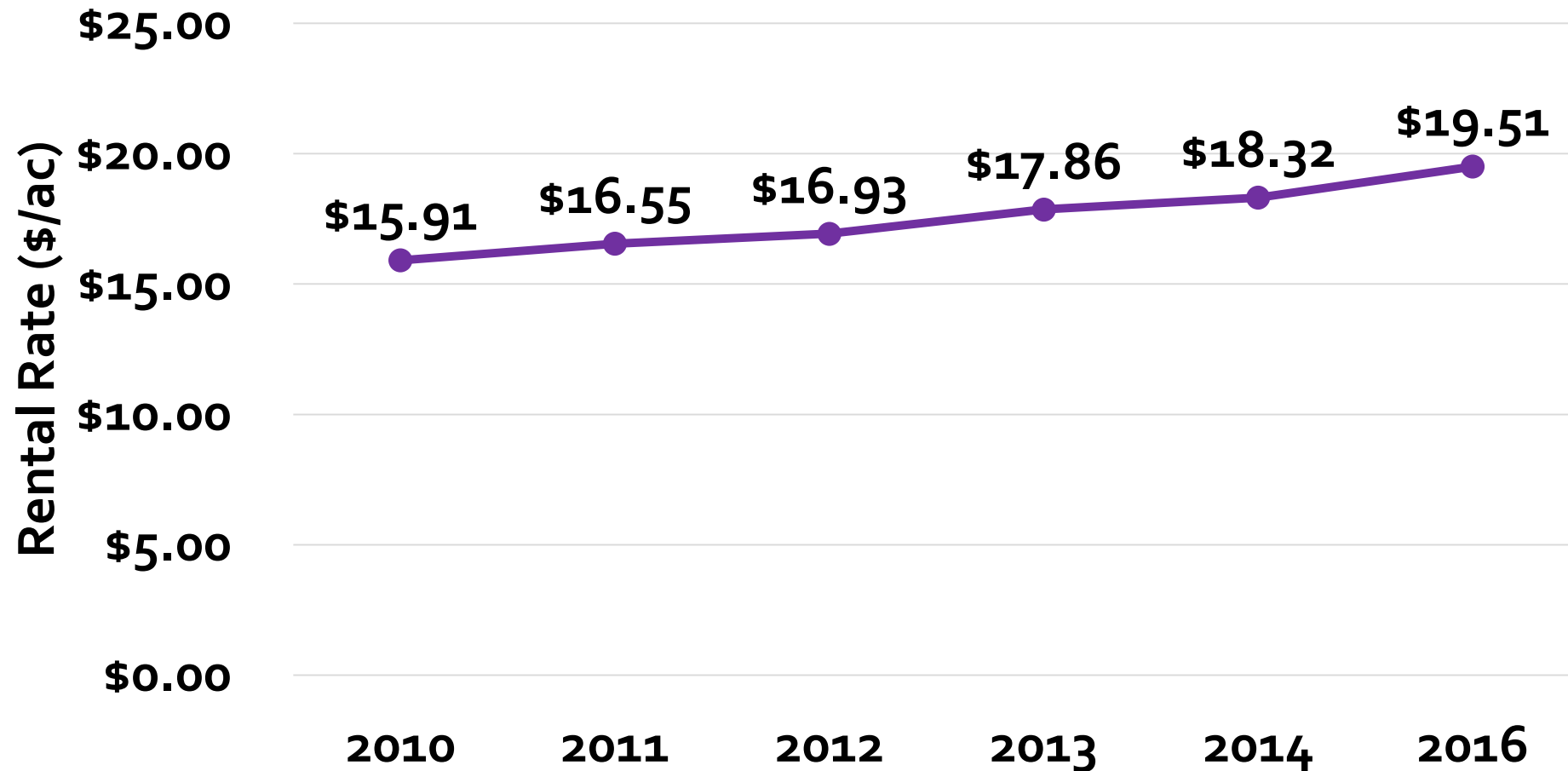




PASTURE



Pasture Rental Rates

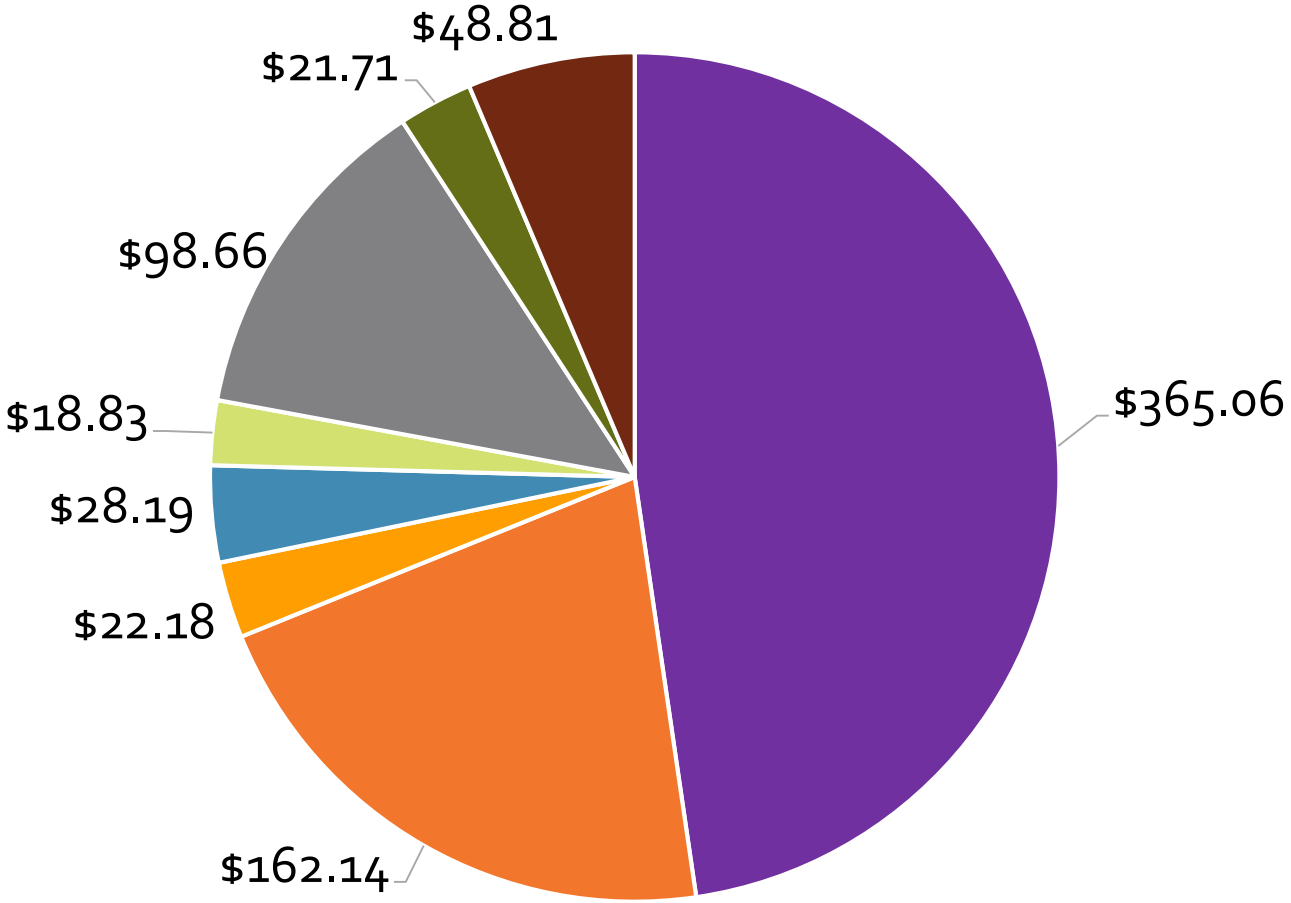


2015 River Valley District Survey

Average	Low-Average	High-Average	Minimum	Maximum	Count
\$27.22	\$20.37	\$32.79	\$11.00	\$54.00	57

- **Clay, Cloud, Washington, and Republic Counties**
- **5 ½ month grazing season**
- **Stocking rates**
 - Pairs averaged 6.2 acres (3.5 to 10)
 - Stockers averaged 3.2 acres (2 to 5)

KFMA Beef Cow-Calf Enterprise Variable Costs, 2011-2015



- Feed
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WINTER GRAZING



Crop Residue

- **Advantages**

- Feed savings/additional weight gain
- Reduced wear-and-tear of facilities and equipment
- Additional income

- **Disadvantages**

- Remove nutrients and organic matter
- Requires fencing and water source
- Lack of shelter
- Soil compaction



Crop Residue

- **Post Rock Extension District 2015 Leasing Survey**

- Crop Residue: \$9.00 per acre (Range \$5-\$25)

- **University of Nebraska 2015 Survey**

- Corn Stalks: \$11-\$15 per acre

- **Iowa State University 2016 Cash Rental Rates Survey**

- Corn Stalks: \$12 per acre (Range \$8-\$19)

Cover Crops

- **Advantages**
 - Improve soil and water quality
 - Erosion control
 - Winter feed source
- **Disadvantages**
 - Increased costs, management and labor
 - Require fencing and water source
 - Insufficient yields will make grazing a net loss
- **KSU-Cover Crop Cost-Return Budget**



Cover Crop Cost-Return Budget

Cereal Rye & Turnip in Southeastern Kansas

Department of Agricultural Economics - www.AgManager.info

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INCOME PER ACRE	Yield Level, tons/ac		
	1.00	1.75	2.50
A. Yield per acre	1.00	1.75	2.50
B. Net Grazing Income	\$56.52	\$84.26	\$120.37
D. Government Payment	\$0.00	\$0.00	\$0.00
E. Miscellaneous income	\$0.00	\$0.00	\$0.00
F. Returns/acre (B+D+E)	\$56.52	\$84.26	\$120.37
COSTS PER ACRE			
1. Seed	\$33.00	\$33.00	\$33.00
2. Herbicide	0.00	0.00	0.00
3. Insecticide / Fungicide	0.00	0.00	0.00
4. Fertilizer	0.00	22.40	44.80
8. Miscellaneous	0.00	0.00	0.00
9. Machinery Expense	19.77	25.96	25.96
10. Non-machinery Labor	7.50	7.50	7.50
G. SUB TOTAL	\$60.27	\$88.86	\$111.26
13. Interest on 1/2 Nonland Costs	1.51	2.22	2.78
H. TOTAL COSTS	\$61.78	\$91.08	\$114.04
I. RETURNS OVER COSTS (F - H)	(\$5.26)	(\$6.82)	\$6.33
J. TOTAL COSTS/TON (H/A)	\$61.78	\$52.05	\$45.62
K. RETURN TO ANNUAL COST (I+13)/G	-6.22%	-5.18%	8.19%

- Profitability depends on yields
- Head/acre: 1, 1.5, 2.1
- Rent charged: \$0.75/head/day
- 75 grazing days



NEW SOURCES



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Winter Wheat

- Grain only
- Dual purpose wheat
- Wheat is grazed out
- Tools
 - Wheat Stocker Planner & Grazeout (OSU)
 - Wheat Grazing and Wheat Graze-Out (KSU)



Conservation Reserve Program

- **2014 Farm Bill reduced available CRP acres and many KS expiring contracts are not being renewed**
 - Pasture supply increase, at least locally
- **Cropping not profitable in short run**
 - Quality of the land
 - Low profitability
- **Pasture**
 - Investment in fencing and water (EQIP)
 - Need for range management plan to optimize the stocking rate



Summary

- **Grazing alternatives and their costs change quickly**
- **Winter grazing alternatives will require some long-run investment**
 - Fencing/hot wire
 - Water sources
 - Leasing relationships
- **Strategic partnerships offer benefits for both crop and livestock producers**

Strategic Partnerships



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