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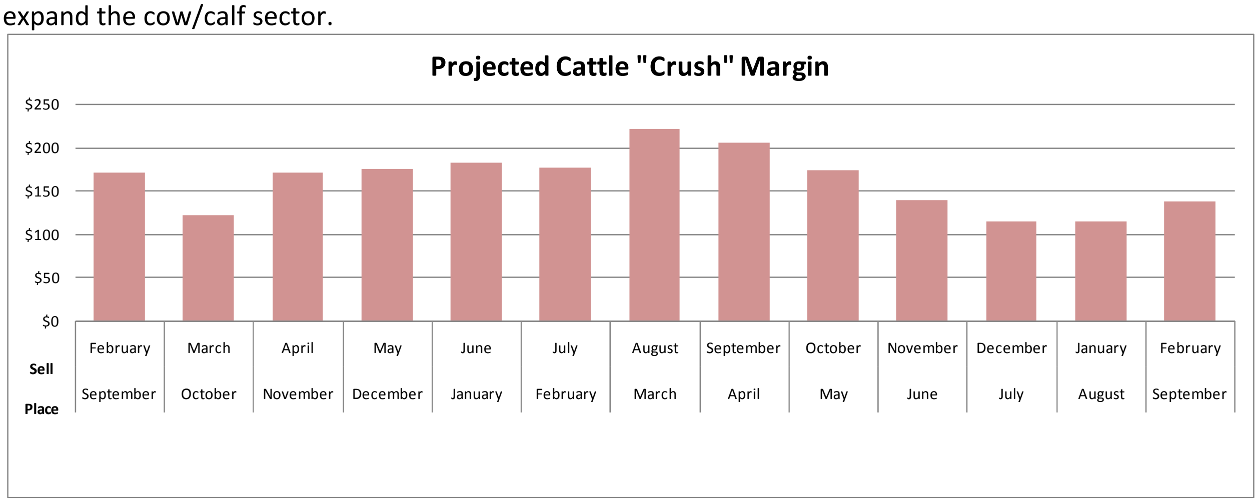
Feedlot Crush Margins

Two weeks ago, opportunities for locking in profitable margins at the feedlot level were discussed in this newsletter by Dr. Derrell Peel of Oklahoma State. While not everyone may be interested in feeding their own cattle in a feedlot, what happens at the feedlot level certainly will transfer back through the supply chain to the cow/calf producers that are the backbone of beef production in this state. The "crush" margin provides a quick snapshot of potential returns to the feedlot industry.

The "crush" margin is fairly easy to compute if the person has access to futures market prices for fed cattle, feeder cattle, and corn. Basis adjustments to the corn and fed cattle prices would also be made to account for regional differences in the cash market. The crush margin is calculated as the revenue earned from the fed cattle and subtracting the cost of feeder cattle and for 50 bushels of corn. The amount of corn needed will be variable depending on the starting and ending weight for the animals fed. In the example presented here, a 750 pound steer is fed until it weighs 1250 pounds. The nearby futures price was used for months that are not traded (month closest to when fed animal would be sold). Using today's futures closing prices and adjusting for the basis, the crush margin for a steer placed in November in Texas and assumed to be fed for 5 months, the margin is:

(12.5 x \$85.51) – (\$94.80 x 7.5) – (50 x \$3.74) = \$170.88/head

The profit projected for placing a steer in the feedlot in November and finished in March only accounts for the cost of the cattle and the corn. Feedlots have other costs not accounted for in this margin and total costs associated with feeding cattle can range from \$200 to \$250 per head in the Southern Plains that the margin must cover. One major drawback of using the crush margin is that it reflects the futures market's current view of anticipated supply and demand conditions. If demand were suddenly to pick up, the projected margin would change. As with any risk management tool, make sure all factors of production are locked in (fed cattle and corn price). The graph below indicates that given the current market situation, it will still be sometime before profitability returns to the feedlot and incentives to expand the cow/calf sector.



Source: CME Group, LMIC

The wet conditions locally that have prevented hay being harvested are slowing down crop harvest further north. Wet weather is also putting a damper on calf demand by those producers who stocker cattle on winter wheat pasture. It's not too late for these producers to source cattle for grazing, but the longer the wet weather persists, the question then becomes what those producers do with wheat that has already been planted: either graze it out or harvest it for wheat. Progress in harvesting soybeans has now passed corn progress. There has been some discussion this week on if producers will let the corn still in the fields dry naturally prior to harvesting or use propane to dry the corn (which has increased in price of late). There will be some yield loss associated with letting the corn dry in the fields, but this will still be one of the largest corn crops on record. In other news, this week it was announced 26,000 dairy cows were accepted into the latest Cooperatives Working Together (CWT) dairy herd buyout, much lower than expected.

Contracts for corn as well fed and feeder cattle were lower this week. Weather concerns have built a premium into the corn market for the time being given uncertainties with regards to the size of the crop. A stronger dollar and lower crude oil futures pushed corn contracts down this week. Although live cattle trade was higher again this week, fed futures weren't able to turn this into a rally with consumer spending falling last month and renewed strength in the dollar making our beef exports more expensive to foreign consumers. Lower corn futures were unable to provide support for feeder contracts with lower fed prices and economic concerns.

Cash fed cattle trade took place on Wednesday and Thursday this week with prices continuing upwards. Live prices were $86 up to $88 (mainly in Texas). Dressed prices ranged $132 to $139 in Kansas. Choice boxed beef prices pushed above $140 for the week (the first time in a month above this threshold). Select prices were at $136 for the week.

In Louisiana, cull cows and bulls sold mostly steady as did feeder steers and heifers with some weight groups seeing firmer prices.

Table 1. Louisiana Auction Prices for the Week Ending October 30, 2009

Weight	Steers	Heifers	Slaughter Classes	
200-250	$120-125	$105-115	Breakers	$40-49
250-300	$98-134	N/A	Boners	$36-47
300-350	$95-133	$78-95	Lean	$30-43
350-400	$96-125	$78-103		
400-450	$90-113	$77-100	Bulls, YG 1-2, <1,500 lbs	$49-53
450-500	$80-111	$74-89	Bulls, YG 1-2, >1,500 lbs	$50-58
500-550	$80-102	$70-94		
550-600	$78-89	$70-82		
600-650	$74-90	$67-84[1]		
650-700	$75-85	$67-84[1]		

Note: All prices are in $/cwt, steers and heifers are Medium and Large 1-2
Price ranges may reflect higher prices received in northern areas of the state in the middle of the week
[1] Represents the price was reported in hundred pound increments as opposed to fifty pound increment.
Source: USDA AMS

Table 2. Louisiana Auction Prices for the Week Ending October 23, 2009

Weight	**Steers**	**Heifers**	**Slaughter Classes**	
200-250	$120-135[1]	$103-115[1]	Breakers	$40-47.50
250-300	$120-135[1]	$103-115[1]	Boners	$37-47
300-350	$93-133	$80-110	Lean	$31-42
350-400	$91-123	$76-106		
400-450	$88-116	$74-105	Bulls, YG 1-2, <1,500 lbs	$42.50-52
450-500	$80-108	$70-96	Bulls, YG 1-2, >1,500 lbs	$50-57.50
500-550	$82-102	$70-93		
550-600	$76-94	$70-89		
600-650	$78-88	$68-83[1]		
650-700	$76-86	$68-83[1]		

Note: All prices are in $/cwt, steers and heifers are Medium and Large 1-2
Price ranges may reflect higher prices received in northern areas of the state in the middle of the week
[1] Represents the price was reported in hundred pound increments as opposed to fifty pound increment.
Source: USDA AMS

Table 3. Futures Prices

Month	Live Cattle	Change*	Feeder Cattle	Change*	Corn	Change*
Oct	$ 81.65	-4.70				
Nov			$ 94.80	-0.67		
Dec	$ 85.68	-1.73			366	-31 3/4
Jan			$ 95.08	-0.72		
Feb	$ 86.85	-0.90				
Mar			$ 95.60	-1.08	379 1/4	-30
Apr	$ 88.65	-0.82	$ 96.40	-1.00		
May			$ 97.25	-0.75	388 1/4	-29 1/4
Jun	$ 85.28	-1.13				
Jul					396 1/2	-28 1/4
Aug	$ 85.13	-1.25	$ 98.45	-0.85		
Sept			$ 98.90	-0.30	403 3/4	-23
Oct	$ 87.70	-1.70	$ 99.00	N/A		

Source: DTN
* Change is from the previous Friday's close

Table 4. State and National Market Information

Commodity	This Week	Last Week	Last Year
5 – Area Fed Steer Price			
Live	$ 86.84	$ 84.59	$ 91.19
Dressed	$ 133.86	$ 131.62	$ 140.34
Oklahoma City Feeder Cattle Prices			
5-5.5 cwt Med and Large #1	$ 107.04	$ 108.25	$ 109.65
7.5-8 cwt Med and Large #1	$ 95.16	$ 94.70	$ 96.76
Boxed Beef Cutout Values (weekly average)			
600-900 lb Choice cutout	$ 141.15	$ 137.68	$ 142.06
600-900 lb Select cutout	$ 135.79	$ 133.15	$ 135.51
Georgia Dock Broilers	$ 81.74	$ 81.95	$ 87.02
Georgia B/S Breasts	$ 124.00	$ 124.50	$ 113.00
Georgia Leg Quarters	$ 37.50	$ 37.50	$ 47.50
Meat production (million lbs)			
Beef	518.9	515.5	503.1
Pork	463.9	470.3	479
Slaughter (1,000 head)			
Cattle	651	646	638
Hogs	2,294	2,323	2,386
Broilers/Fryers	167,531	168,057	160,691
Average Dressed Weight			
Cattle	800	801	791
Hogs	202	202	201
	10/24/2009	10/17/2009	10/26/2008
Poultry Placements (in thousands)[1]			
LA Broiler Egg Sets	2,917	3,379	2,740
US Broiler Egg Sets	187,586	186,756	191,280
LA Broiler Chick Placements	2,361	3,113	3,078
US Broiler Chick Placements	150,844	159,962	154,412

Source: USDA Agricultural Marketing Service, USDA National Agricultural Statistics Service and Livestock Marketing Information Center

[1] Note the placements numbers are lagged by one week prior to publishing.