

Table 1. Summary of Cattle Price Forecasting Errors (\$/cwt), Futures with Five-year Basis, and Forecast Errors.

Forecast Errors One Quarter Out		
	Index	Futures
Average	-0.3%	0.4%
Std Dev	6.2%	4.1%
Min	-23.7%	-8.6%
Max	17.3%	11.0%
Two Quarters Out		
	Index	Futures
Average	-0.2%	0.4%
Std Dev	8.4%	7.7%
Min	-19.6%	-24.4%
Max	23.1%	26.4%
Three Quarters Out		
	Index	Futures
Average	0.0%	1.1%
Std Dev	8.9%	9.3%
Min	-18.5%	-35.7%
Max	27.5%	32.4%
Four Quarters Out		
	Index	Futures
Average	0.3%	1.0%
Std Dev	8.3%	10.0%
Min	-18.3%	-32.8%
Max	22.1%	31.5%
Overall		
	Index	Futures
Average	-0.1%	0.7%
Std Dev	7.9%	7.8%
Min	-20.0%	-25.4%
Max	22.5%	25.3%

Table 2 is a comparison between two periods, 1990 to 1999 and 2000 to 2008. This provides an idea of how the forecasts are behaving and if our forecasting tools are still effective. Comparing across the two time periods we can see two different behaviors in the method of forecasting. The Index demonstrates a greater standard deviation in 1990-1999, than the Futures in the same period. However, during the 2000-2008 period, the Index has a lower overall standard deviation than the Futures. The

Index's errors average higher than the Futures' errors from 1990-1999, but are lower from 2000-2008. Between the two periods, the Index became more accurate and volatile on average, while the Futures became more volatile and less accurate.

Table 2 . Summary of Cattle Price Forecasting Errors (\$/cwt), Futures with Five-year Basis, and Ten-year Seasonal Index (1990-1999 and 2000-2008).

One Quarter Out				
	1990-1999		2000-2008	
	Index	Futures	Index	Futures
Average	-0.5%	-0.2%	-0.2%	1.0%
Std Dev	4.7%	4.1%	7.6%	4.0%
Min	-9.5%	-8.6%	-23.7%	-3.8%
Max	9.5%	11.0%	17.3%	11.0%
Two Quarters Out				
	1990-1999		2000-2008	
	Index	Futures	Index	Futures
Average	-1.0%	-0.1%	0.7%	0.9%
Std Dev	7.0%	6.2%	9.9%	9.2%
Min	-14.1%	-13.5%	-19.6%	-24.4%
Max	12.9%	12.0%	23.1%	26.4%
Three Quarters Out				
	1990-1999		2000-2008	
	Index	Futures	Index	Futures
Average	-1.3%	0.7%	1.5%	1.5%
Std Dev	8.1%	7.1%	9.6%	11.3%
Min	-16.3%	-15.3%	-18.5%	-35.7%
Max	16.0%	13.5%	27.5%	32.4%
Four Quarters Out				
	1990-1999		2000-2008	
	Index	Futures	Index	Futures
Average	-1.6%	0.3%	2.5%	1.8%
Std Dev	7.9%	7.5%	8.2%	12.1%
Min	-18.3%	-17.9%	-17.6%	-32.8%
Max	15.5%	16.6%	22.1%	31.5%
Overall				
	1990-1999		2000-2008	
	Index	Futures	Index	Futures
Average	-1.1%	0.1%	0.7%	1.3%
Std Dev	5.9%	4.7%	7.4%	7.9%
Min	-11.1%	-10.6%	-14.2%	-24.2%
Max	9.3%	9.1%	13.8%	17.2%

Table 3 shows the average forecast error by month of the report for the last 19 years, 1990 to 2008. With a few exceptions, variability follows the usual model and increases with the quarters as shown by the increases in standard deviation with increases in

distance from the present. On average, the Futures' forecast errors are greater than the Index forecast errors in January, April, and October, and the Futures' standard deviations are higher than the Index's in April and July.

Table 3. Summary of Cattle Price Forecasting Errors (\$/cwt), Futures with three-year Basis, and Ten-year Seasonal Index during the last 19 years (1990-2008).

January/1Q Forecast Error										
	One Quarter Out		Two Quarters Out		Three Quarters Out		Four Quarters Out		Overall	
	Futures	Index	Futures	Index	Futures	Index	Futures	Index	Futures	Index
Average	0.2%	-0.3%	-0.4%	-1.2%	1.3%	-0.2%	1.5%	-0.3%	0.7%	-0.5%
Std Dev	2.6%	8.8%	6.7%	8.9%	8.0%	9.3%	12.0%	7.7%	7.3%	8.7%
April/2Q Forecast Error										
	One Quarter Out		Two Quarters Out		Three Quarters Out		Four Quarters Out		Overall	
	Futures	Index	Futures	Index	Futures	Index	Futures	Index	Futures	Index
Average	0.7%	-0.9%	1.9%	-0.1%	1.9%	-0.6%	1.2%	0.3%	1.4%	-0.3%
Std Dev	5.5%	4.7%	7.6%	7.8%	11.8%	10.9%	9.7%	8.0%	8.6%	7.9%
July/3Q Forecast Error										
	One Quarter Out		Two Quarters Out		Three Quarters Out		Four Quarters Out		Overall	
	Futures	Index	Futures	Index	Futures	Index	Futures	Index	Futures	Index
Average	-0.2%	0.9%	-0.6%	0.4%	0.5%	1.7%	-0.7%	0.9%	-0.2%	1.0%
Std Dev	3.0%	5.0%	10.5%	9.7%	10.2%	7.2%	11.1%	8.7%	8.7%	7.7%
October/4Q Forecast Error										
	One Quarter Out		Two Quarters Out		Three Quarters Out		Four Quarters Out		Overall	
	Futures	Index	Futures	Index	Futures	Index	Futures	Index	Futures	Index
Average	0.7%	-1.0%	0.6%	0.0%	0.5%	-0.7%	2.0%	0.2%	0.9%	-0.4%
Std Dev	4.7%	5.7%	5.7%	7.7%	6.9%	8.0%	6.6%	9.2%	6.0%	7.6%

Summary

Basis adjusted Live Cattle Futures and Seasonal Price Indexes were compared as Live Cattle price forecasting tools. In general, the Index forecast had a smaller forecast error and variability, but both

methods are very accurate. This study quantifies the amount of forecast error, so producers can use this information to determine their need for price risk protection, and become as informed and profitable as possible.

... and justice for all

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