



**Table 1 – Summary of Live Hog Price Forecasting Errors (\$/head), ISU Iowa Farm Outlook, Futures with Three-year Basis, and Ten-year Seasonal Index during the last 10 years (1999-2008).**

Forecast Error: One Quarter Out			
	ISU	Futures	Index
Average	\$1.91	\$1.84	\$0.99
St. Dev.	\$5.33	\$3.55	\$4.41
Min	-\$14.97	-\$5.06	-\$7.14
Max	\$11.39	\$8.95	\$12.80
Forecast Error: Two Quarters Out			
	ISU	Futures	Index
Average	\$1.97	\$1.89	\$1.35
St. Dev.	\$6.22	\$5.55	\$6.20
Min	-\$11.46	-\$8.44	-\$10.24
Max	\$18.13	\$13.29	\$16.98
Forecast Error: Three Quarters Out			
	ISU	Futures	Index
Average	\$2.51	\$2.53	\$1.71
St. Dev.	\$6.61	\$6.72	\$7.75
Min	-\$9.66	-\$9.75	-\$13.82
Max	\$19.29	\$18.27	\$18.69
Forecast Error: Four Quarters Out			
	ISU	Futures	Index
Average	\$2.81	\$3.46	\$1.84
St. Dev.	\$7.53	\$7.42	\$8.74
Min	-\$14.43	-\$12.73	-\$16.44
Max	\$18.48	\$19.86	\$21.49

  

Forecast Error: One Quarter Out			
	ISU	Futures	Index
Average	3.27%	3.39%	2.60%
St. Dev.	11.82%	7.66%	11.61%
Min	-36.03%	-15.06%	-19.92%
Max	24.81%	19.50%	47.26%
Forecast Error: Two Quarters Out			
	ISU	Futures	Index
Average	3.02%	3.02%	2.82%
St. Dev.	13.04%	12.34%	14.80%
Min	-26.96%	-23.56%	-24.89%
Max	32.01%	24.43%	50.51%
Forecast Error: Three Quarters Out			
	ISU	Futures	Index
Average	3.91%	3.79%	2.86%
St. Dev.	14.04%	15.18%	18.76%
Min	-27.25%	-36.01%	-38.57%
Max	32.81%	31.08%	53.08%
Forecast Error: Four Quarters Out			
	ISU	Futures	Index
Average	3.93%	5.24%	2.81%
St. Dev.	17.59%	17.15%	21.10%
Min	-53.30%	-47.02%	-45.88%
Max	33.01%	35.47%	60.10%

It is also important to appreciate how much variability there is associated with a forecast. The standard deviation of the least variable forecast one quarter out indicates that prices are expected to fall into a \$7.10 range (+ and – one standard deviation) approximately 68 percent of the time. When looking four quarters into the future, the time necessary to make breeding decisions, the 68 percent range grows to over \$14.84 for the least variable forecast. While some may discard the forecast altogether because of the wide range, the value is helpful to quantify how low prices could be. Producers then can use that price protection if the forecast indicates an unacceptable risk.

Table 2 summarizes the average error and variability of each forecast for the last 10 years, 1999 to 2008, for each forecast month. In January, the ISU forecasts had the lowest average errors for each

number of quarters into the future with the exception of four quarters into the future. In April and July, the Seasonal Index had the lowest average errors for all quarters into the future. In October, the Seasonal Index had the lowest average errors in all quarters into the future with the exception of two quarters into the future. As expected, the variability tends to increase as the distance forecasted into the future increases.

On average, all forecasts did a fairly good job predicting hog prices in the volatile markets. As shown by the average errors, the January Forecast itself was best at predicting one quarter into the future, and worst at predicting three quarters into the future. The April Forecast was best at predicting four quarters into the future and worst one quarter into the future. The July and October Forecasts were best at predicting two quarters into the future, and worst four quarters into the future.

**Table 2 – Summary of Live Hog Price Forecasting Errors (\$/cwt), ISU Iowa Farm Outlook, Futures with Three-year Basis, and Ten-year Seasonal Index during the last 10 years (1999-2008).**

<b>January Forecast Error</b>						
	One Quarter Into The Future			Two Quarters Into The Future		
	ISU	Futures	Index	ISU	Futures	Index
Average	\$0.16	\$1.74	\$2.73	\$2.18	\$3.08	\$3.18
St. Dev.	\$7.00	\$3.07	\$4.68	\$8.61	\$6.01	\$8.33
	Three Quarters Into The Future			Four Quarters Into The Future		
	ISU	Futures	Index	ISU	Futures	Index
Average	\$2.66	\$3.43	\$3.16	\$1.29	\$1.03	\$2.58
St. Dev.	\$8.67	\$7.49	\$9.55	\$8.39	\$7.47	\$10.01
<b>April Forecast Error</b>						
	One Quarter Into The Future			Two Quarters Into The Future		
	ISU	Futures	Index	ISU	Futures	Index
Average	\$3.33	\$2.73	\$1.10	\$3.51	\$1.52	\$0.44
St. Dev.	\$5.12	\$4.10	\$5.51	\$7.27	\$5.58	\$6.53
	Three Quarters Into The Future			Four Quarters Into The Future		
	ISU	Futures	Index	ISU	Futures	Index
Average	\$2.09	-\$0.56	\$0.23	\$0.76	\$1.73	\$0.84
St. Dev.	\$6.46	\$6.78	\$6.62	\$7.55	\$8.04	\$7.47
<b>July Forecast Error</b>						
	One Quarter Into The Future			Two Quarters Into The Future		
	ISU	Futures	Index	ISU	Futures	Index
Average	\$2.31	\$2.23	\$0.30	\$1.24	\$0.96	-\$0.18
St. Dev.	\$4.56	\$3.92	\$3.54	\$3.79	\$6.19	\$4.94
	Three Quarters Into The Future			Four Quarters Into The Future		
	ISU	Futures	Index	ISU	Futures	Index
Average	\$1.16	\$3.53	\$0.74	\$4.38	\$6.19	\$1.29
St. Dev.	\$4.79	\$7.12	\$5.97	\$6.92	\$7.36	\$9.08
<b>October Forecast Error</b>						
	One Quarter Into The Future			Two Quarters Into The Future		
	ISU	Futures	Index	ISU	Futures	Index
Average	\$1.84	\$0.67	-\$0.15	\$0.96	\$1.99	\$1.97
St. Dev.	\$4.62	\$3.25	\$3.73	\$4.70	\$5.04	\$4.74
	Three Quarters Into The Future			Four Quarters Into The Future		
	ISU	Futures	Index	ISU	Futures	Index
Average	\$4.13	\$3.72	\$2.69	\$4.81	\$4.90	\$2.66
St. Dev.	\$6.65	\$5.35	\$9.10	\$7.47	\$6.57	\$9.47

## Summary

These three forecasting methods all provide valuable information regarding risk in the hog market. They, and the information they provide, are best used to avoid the risk of low prices and variability whenever possible.

... and justice for all

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