Name: _____

Econ 337 Agricultural Marketing, Spring 2020

Homework Assignment 1; Due February 13, 2020 (Beginning of Class)

1) A summer backgrounder operator decided to hedge 750 pound feeder steers to be sold in October. He/she sold October futures at $142.225 per cwt and expected basis to be $7.960 per cwt for the quality of steers they will be selling. Assume brokerage commission is $60/round turn or $0.150 per cwt.

a) What price does the backgrounder think they have locked in for these steers come October?

Futures price at which futures contract is sold
+ Expected basis
– Brokerage commission
Expected selling price

142.225 + 7.960 – 0.150 = $150.035 per cwt

Parts b and c are stand alone questions using this same initial position from question 1.

b) In October, the backgrounder sells the steers for $164.975 per cwt and closes his/her futures contract at a price of $153.090 per cwt.

-what is the gain/loss on the futures position?

Sold OCT FC futures
– Offset (buy) OCT FC futures
Net gain on futures transaction

142.225 – 153.090 = -$10.865 per cwt

-what did basis turn out to be?

Cash – Futures = Basis
164.975 – 153.090 = $11.885 per cwt

-what is the net selling price on the calves?

-Is the expected selling price equal to the net selling price? If yes, why? If not, why not?

c) Forget part b! In October, the backgrounder sells the steers for $156.765 per cwt and closes his/her futures contract at a price of $149.675 per cwt.

-what is the gain / loss on the futures position?

-what did basis turn out to be?

Cash – Futures = Basis
156.765 – 149.675 = $7.090 per cwt

-what is the net price on the calves?

Price received in cash market
+ Net on futures transaction
– Brokerage commission
Net Selling Price

156.765 – 7.450 – 0.150 = $149.165 per cwt

-Is the expected selling price equal to the net selling price? If yes, why? If not, why not?

The expected selling price is not equal to the net selling price. It would have been if the expected basis equaled the actual basis. Basis weakened or narrowed or decreased. Because basis weakened from what was expected the net selling price was lower than the expected selling price.

2. This question is designed to give you some practice using spreadsheets and estimating basis for feeder cattle. Use the "CombinedAuctionIA-Feeder Cattle Cash Prices" and "Feeder Futures Prices" spreadsheets to estimate basis for each month and each year for feeder cattle. Calculate the 5-year average basis by month. Using a spreadsheet will be much quicker than doing this by hand.

Write your basis estimates into the table below, or attached a print out of the table.

Combined Iowa auction feeder cattle basis, 2015-2019 for 700-800 lb no. 1 steers ($/cwt)

Market Period	Contract For Basis	2015 Basis	2016 Basis	2017 Basis	2018 Basis	2019 Basis	5-yr Avg Basis
January	January	6.55	-0.50	5.02	5.39	2.94	3.88
February	March	16.71	5.53	7.11	5.94	3.30	7.72
March	March	9.22	4.48	7.11	11.68	6.26	7.75
April	April	12.33	1.58	8.81	13.32	7.72	8.75
May	May	13.58	4.85	10.35	8.99	11.23	9.80
June	August	18.20	7.37	4.02	2.34	4.99	7.39
July	August	16.92	9.44	9.88	7.97	2.21	9.28
August	August	8.69	6.40	9.72	10.34	10.69	9.17
September	September	12.08	6.52	9.50	5.55	7.96	8.32
October	October	6.85	6.05	7.16	4.29	4.33	5.74
November	November	1.59	4.09	5.31	-1.51	2.87	2.47
December	January	-0.64	8.05	13.02	1.38	2.44	4.85

Notes:

1/ Basis is calculated as Cash - Futures. A negative sign means that futures are greater than cash.

2/ Cash price is for large and medium frame steers.

Describe the seasonal basis pattern for Iowa 700-800 lb large and medium frame no. 1 steers. You can just describe the basic seasonal pattern and in which month basis is the highest and lowest. Also note if there is a month that seems like an outlier. Using the 5-year average calculation to describe would be appropriate.

In general, Iowa 700-800 lb large and medium frame no. 1 steer basis is narrow (weakest) in the fall and early winter (i.e., October, November, December, and January) and widest (strongest) in the summer and early fall. May and July are the highest and November is the lowest. November appears to be an outlier as basis goes from $5.74/cwt in October to $2.47/cwt in November to $4.85/cwt in December. Same could be said for the May to June to July pattern.