ESO 763

THE WORLD PRICE OF GRAIN: A Case Study

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According to economic theory, there is one central price of a commodity. The price of grain does vary from location to location due to transportation factors, availability of storage space, quality factors, and time of year. The various individual prices of grain are functionally inter-related to form a basic economic value of the grain. In economic terms this is the equilibrium price. Frequently, individual locational prices are in disequilibrium, out of line with the central price. This creates an opportunity for grain merchants to profit by trading against the disequilibrium. In playing the role of opportunists, merchandisers cause individual local prices to tend toward the equilibrium price.

The following case puts you in the role of a corn merchant located in Chicago. Your objective should be to optimize your trading profits in taking advantage of the merchandising opportunities described in the case.

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Date: May 1

You are the corn merchant in your company's Chicago office. Your New York corn desk advises you that a buyer in Germany is in the market tonight for two cargoes, No. 3 Yellow Corn - 1,000,000 bu. each, for shipment one each FH (first half) and LH May. The following information is pertinent for formulating your decision as to what prices you want to offer the foreign buyer.

Offers At Various Ports, FH May (FOB):	
New Orleans	+22 May
Norfolk	+26 May
Duluth/Superior	- 6 May
Toledo	0 May
Chicago (Others)	- 2 May

(Note: +22 May means exporters in N.O. are willing to pay a cash price 22 cents over the May corn futures contract price, whatever that price might be at the time the trade is made.)

For the LH May position all offers are 3/4¢ higher, except Duluth/Superior is no higher.

Vessel Freight To Germany As Quoted By Your New York Corn Desk:	
EX New Orleans	35¢/bu.
EX Norfolk	33¢/bu.
EX Duluth/Superior	60¢/bu.
EX Toledo	54¢/bu.
EX Chicago	57¢/bu.

Based on the information on the previous page, at what price level relative to the May future must you offer to sell merely to be competitive with the lowest delivered German price? FH May FOB Chicago ___________ LH May FOB Chicago ________.

Now that your prices are in line with other markets, we will consider just a few factors in determining your strategy. For simplicity, we will ignore factors not mentioned up to now. Some of these factors are the relative level of futures prices for the various contract months, expected movement of futures prices, anticipated farm and country elevator selling, level of carrying charges, etc.

Assume that Iowa corn is offered in quantity at -36¢ May TCS (on track country station) for nearby shipment by rail. Domestic users appear relaxed. The average freight rate is 52¢/bu. to New Orleans and 38¢/bu. to Chicago. You have only 700,000 bu. space available in your elevators in Chicago until May 10th when you expect the arrival of a vessel to take on a cargo of soybeans. Your truck run, all grains, is about 65,000 bu. per day and is your least cost supply of grain. You presently own 400,000 3YC. Does this change your offer? If so, what might your offer be and why?

DATE: May 8

New York has sold the two cargoes for you. The transaction was immediately hedged to protect your merchandising margin. The hedge will not be lifted until the corn is delivered. In the last week according to plan, your Des Moines office, at your direction, bought 1.3 million bushels Iowa rail corn for export at about -7 May Chicago. Most of the corn has not been shipped year. Of the corn that has been shipped, 20% is running 4YC because of damage for which you are allowed discounts. Today, May corn advanced 4¢ per bushel, and your country merchants advise you their truck bid of -10 May delivered Chicago will buy a large quantity of good quality corn. The May/July carrying charge is 7¢/bu. Space remains somewhat of a limiting factor.

This afternoon your St. Louis office informs you there has been another breakdown at the Alton Lock, which is at the junction of the Illinois and Mississippi Rivers north of St. Louis. Barge traffic able to get on and off the Illinois River will be reduced by 50%. Repairs are expected to take three weeks. The New Orleans export market price has immediately jumped to +20 May and looks strong.

Values FOB vessel New Orleans for late May, early June are offered at 16 over the July. Vessel freight is unchanged and European consumers appear fairly well covered for the next 45 days.

Des Moines now reports that news of the problem at the Alton Lock has reached domestic processors. They sound concerned. Further, Iowa movement of corn has been slow as it appears the farmers are bullish. Des Moines is being asked for offers by processors and terminal markets.

Average rail rates from Iowa country elevators are as follows:

Kansas City	22¢
New Orleans	52¢
Chicago	38¢
Clinton, Iowa	15¢

Describe your merchandising plan. In other words, how do you plan to take advantage of the current market situation?