Informed Storage: Understanding the Risks and Opportunities

Randy Fortenbery

School of Economic Sciences
College of Agricultural, Human, and Natural Resource Sciences
Washington State University
The objective of marketing is:

• NOT to make money in the futures market.
• NOT to sell at the highest price of the year.
• NOT to generate accurate price forecasts.
• TO minimize the risk associated with achieving a target level of income.
Futures Market

• Sends price signals to the entire grain marketing chain

• Actively used at all levels of the grain market chain EXCEPT the farm

• Is unique in its application of financial leverage
## Soft Red Winter Wheat Futures

<table>
<thead>
<tr>
<th>Month</th>
<th>Last</th>
<th>Chg</th>
<th>High</th>
<th>Low</th>
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<tbody>
<tr>
<td>Dec-23</td>
<td>607'0</td>
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</tr>
<tr>
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<tr>
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<td>642'2</td>
<td>638'6</td>
</tr>
<tr>
<td>Sep-24</td>
<td>650'4</td>
<td>-1'2</td>
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<tr>
<td>Dec-24</td>
<td>663'6</td>
<td>-0'2</td>
<td>664'4</td>
<td>662'2</td>
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</table>
The Objective of Storage

• Earn a profit over and above storage costs.

• There are two ways to profit from storage:
  ▪ Futures prices rally and cash price follow
  ▪ Cash price improve even if futures don’t – i.e. the basis strengthens.

• If you are simply speculating on higher prices without the market “telling you” to expect better cash prices, there are often less expensive (or lower risk) ways to do that.
2020/21 July Soft Red Wheat Futures Prices

- $5.50
- $5.75
- $6.00
- $6.25
- $6.50
- $6.75
- $7.00
- $7.25
- $7.50
2021/22 July Soft Red Wheat Futures Prices
2023/24 July Soft Red Wheat Futures Prices
2023 Portland Soft White Wheat Price

- $6.85
- $6.90
- $6.95
July 2023 Soft Red Futures Prices
Soft White Price Wheat - Portland
July Futures vs. Cash Prices
Making the Storage Decision

• Consider the carry in the futures market (are prices for later delivery higher than nearby futures prices?)

• Evaluate the basis – the difference in the futures price and the cash price

• We need to make at least 3.5¢ per month to cover storage costs and risk
Basis and Price Formation

Basis is the difference between a cash price at a specific location and the price of a particular futures contract. The cash price offered to a grain producer for any given marketing strategy is a function of local basis.
Basis Changes

• The lower the cash price relative to futures prices, the weaker the basis. A weak basis is good for cash buyers, and bad for cash sellers.

• The higher the cash price is relative to futures, the stronger the basis. A strong basis is bad for cash buyers, and good for cash sellers.
Determination of Basis

Major Factors

- **COST OF STORAGE**: Determines basis over a given crop year. Also affects the price difference between a nearby and a distant futures contract in a given crop year.

- **COST OF TRANSPORTATION**: Determines basis geographically.
Determination of Basis

Other Factors:

- Local supply and demand conditions
- Grain quality
- Intensity of local Competition
Recording Basis

To record historical basis levels, collect closing futures prices for the contract closest to maturity (but not expiring in the current month) each Wednesday, and the corresponding cash price (collected later Wednesday or Thursday morning). Subtract the futures price from the cash price. Average the Wednesday basis calculations for each month to arrive at the average monthly basis level.
## Portland White Wheat Basis

<table>
<thead>
<tr>
<th></th>
<th>Jun</th>
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<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
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<th>Mar</th>
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<td>$0.67</td>
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Portland Basis
5 year average vs. this year

Cash $6.91
Futures $6.09
Basis $0.82
Calculating Expected Return to Storage

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<tr>
<th></th>
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July 2024 Futures Prices for Soft Red Winter Wheat
Market Options

Post-Harvest –

- Store un-priced
- Store with a forward cash contract
- Store with an HTA
- Store with a basis contract
So What Do I Do?

• River Boat Gambler or Recent Lottery Winner:
  – Store unpriced at least until all my winnings are gone

• Risk Manager:
  – Good carry in the futures market and a good basis offering – Forward Cash Contract
  – Good carry in the futures market but expect basis to improve – Hedge to Arrive
  – Good basis offering but expect futures to improve – Basis Contract
  – Don’t like the futures carry or the basis offering but want to bet on higher prices – Buy a Call Option
### Expected Cash Price

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<tr>
<th></th>
<th>Sep</th>
<th>Oct</th>
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### Expected Net Cash Price

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### Storage Price Expectations

![Graph showing expected storage price expectations](image-url)