How to Capture a Market Carry

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Kansas City, MO

800-845-7103
diana@grainservice.com  December 2015

What IS a Carry?

When something is worth more later than it is worth today
Why Are Carries Important?

Elevators Make Money:

- Buy grain and hedge
- Sell at a higher basis
- Usually involves holding and shipping later.
  - But holding incurs costs
- Sell at a higher basis
  - (Other: drying, storage, blending etc)
Carries and Returns
Can be elusive

You Need to be Alert
Capturing Carries:

- Means understanding where the carries are
  - Cash basis and/or
  - Futures spreads

- And knowing what to do

Forward Futures Curve (Carry): CORN

Deferred prices are higher than nearby
Lots of Balls to Juggle

Capturing a Carry

1. Buy nearby cash + Sell deferred cash (no hedging)
2. Buy nearby cash + Sell nearby futures;
3. Buy nearby cash + Sell deferred futures
4. Move short hedges forward before you sell the cash basis

5. Sell the cash basis and move short hedges forward later

6. Pre-set a futures carry

The challenge is identifying which approach is best – and when.
### W. Corn Belt ethanol

<table>
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<tr>
<th></th>
<th>Dec</th>
<th>March</th>
<th>June</th>
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<tr>
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<td>-0.13</td>
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<tr>
<td>+ Futures</td>
<td>3.77</td>
<td>3.83</td>
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<tr>
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<td>(0.11)</td>
<td>(0.14)</td>
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### E Corn Belt River Mkt

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<th></th>
<th>Dec</th>
<th>March</th>
<th>June</th>
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<tr>
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<td>3.86</td>
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<tr>
<td>= Net Carry</td>
<td>--</td>
<td>0.06</td>
<td>(0.02)</td>
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Strategy 4  ex.:
Buy cash
Hedge nearby futures
Set spread later
Sell basis later

Ex. Basis ↑ + Wider Spread = Bigger Net Carry

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<tr>
<td>Basis + Futures</td>
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<tr>
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Maximize Both Parts

Futures Carry

+ 

Basis Carry

= 

Cash Market Carry (-costs)

- Stay alert for when buyers are ready to negotiate basis

- Understand what affects basis and futures spreads.
Futures Spreads can be Volatile
and hard to manage for many merchandisers

Best Spread Opportunities
Do NOT always come at harvest
or when you buy the grain
Dec15/July16 CORN

Peak Carry = pre-hvst

Jly 15/Dec15 SRW

Peak Carry = 11 mo before hvst
Looking Ahead:

'16 Crop Corn:

Dec16/July17 Corn Spread

Peak = ?
How do you decide when to set a futures carry?

Corralling the Cats

- Set futures carries when further potential gains are minimal (~80% of FFC ?)
  - First, learn how to calculate FFC
- Be willing to set spreads before you even buy or sell the basis
- Best opportunities may occur early
**Financial Full (Futures) Carry**

- When the price difference between two futures months equals the full cost of carrying/holding
  - from Day 2 of the nearby month
  - to Day 1 of the deferred month.

- Costs include interest and storage.

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**Financial Full Carry (FFC) in Futures**

\[
\text{# days} \times \left( \left( \frac{\text{Interest rate}}{360} \right) \times \text{Futures Price} + \text{Daily Storage Rate} \right)
\]

**Int Rate:** use 2% over 3-Mo. Libor

*(not country elevator interest cost)*
Corn Full Carry

- Changes as price and inter. rates change.
- Currently about 5.9¢ / month
  - March/May = 11.84 FFC
- Int. at 2.44% (2 > Libor)
- Storage at ~5¢/mo ($0.00165/day)

CBOT Dec15/March16 Wheat Full Carry

- 92 days (varies by cycle)
- $X (2.4162%/360)
- $X $4.55 Dec Wht
- + $0.00165/day storage) = FC

$92 \times (0.0006717 \times $4.55 + $0.00165) = \boxed{18¢}

Calculated on 12/1)
CBOT Wheat is Unique

“VSR”
Variable Storage Rate

The Birth of VSR

- 235 Sept

Gulf Barge
Cincinnati

'06 Crop
'07 Crop
'08 Crop
'09 Crop


'06 Crop
'07 Crop
'08 Crop
'09 Crop
2008 SRW

- Too much supply (record crop)
- Not enough demand
- Harvest basis fell to cheaper than -200 on the River
- Farmers called Congress!

CBT’s Solution? VSR

- Allows the max. storage charge a futures delivery elevator can charge on shipping certificates to fluctuate.
  - Min = $.00165/bu/day (5 cts/mo)
  - Can rise by 3 cts/mo; No cap

- CBOT Implemented in July 2010
Principle Behind VSR

- Shifts part of the carry out of nearby discounted basis and into futures spreads.
- Higher storage rates means higher Futures Full Carry and potentially bigger futures carries.

Ex.: Full Carry = 18¢

December = 4.50
March = 4.68
Cash Price = 3.70
Variable Storage Rate

CBOT Wheat Monthly Variable Storage Rate 2010 to Present on Delivery Certificates

SRW July 11 / March 12

8-month spread at $1.40+carry
VSR Does Not Change the Cash Value of Wheat

It tends to bring nearby futures closer to nearby cash (Convergence)

And allows potentially much wider futures spreads
SRW: Cinncy ’10 crop

Launch of VSR

= wider futures carries + higher nearby basis

Scale = 10 cts each vert. hash mark

KCBT

- Their version of VSR:
- Seasonal storage rate:
  - July/Aug/Sept/Oct/Nov (JASON)
  - Rate set at $.00296/day  9 cts/mo
- Other 7 months:
  - $.00197/day (6 cts/month)
Next step in learning how to maximize returns

• Learn economics of making/taking delivery of futures
  – Factors
  – Spread impact
  – Basis

• But not today…not enough time!
Success!

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