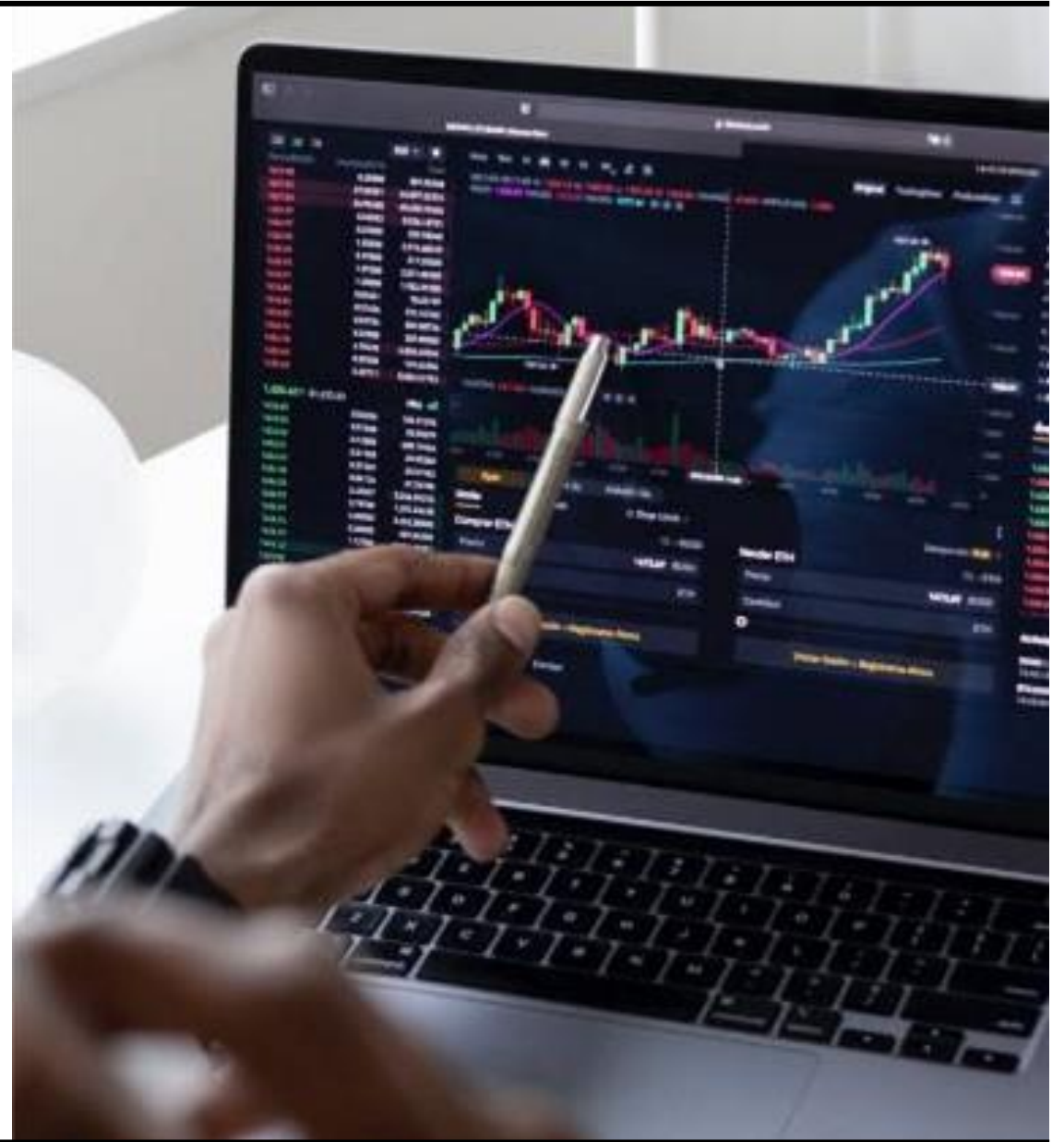

Hedge Fund Strategy Workshop

Group # 1 presentation
July 15th, 2022



Agenda

- 1) Team introduction** (Ryan)
 - 2) Equity recommendation** (Jordan)
 - 3) Future & option recommendation** (Ryan)
 - 4) Open Discussion** (All)
-

Introduction

Group # 1

Samuel Gardner
Jordan Carlen
Alexander Graham

Mat Deterling
Ryan Watkins

Equity Recommendation

Recommendation

**We recommend shorting
Target (TGT)**

Company Background

Background

- **Industry:** Consumer Defensive, Discount Stores
- **TTM Financials:** \$106.98B Revenue; \$10.265B EBITDA
- **Market Cap:** \$68.78B, **Enterprise Value:** \$68.82B
- **TTM Multiples:** 12.13 P / E; .64x EV / Revenue; 6.7x EV / EBITDA

Retail Channels:

(% of Revenue)

- | | |
|-----------------------|---------|
| - Storefront | (96.4%) |
| - Online @ Target.com | (3.6%) |



Investment Thesis

The stock is priced imperfectly because:

- 1) Excess inventory, including markdowns and order cancellation, will continue to weigh on margins ahead of the Fall and Winter seasons.
 - 2) The company is unlikely to match the online retail environment which its competitors already possess and fails to accumulate the needed digital growth.
 - 3) Market expectations for their new store outreach and flexibility to be a core factor in increased sales and margins is inaccurate, as consumer confidence has been decreasing due to inflation and the company is additionally faced with higher labor and shipping costs, which do not see short term decline.
-

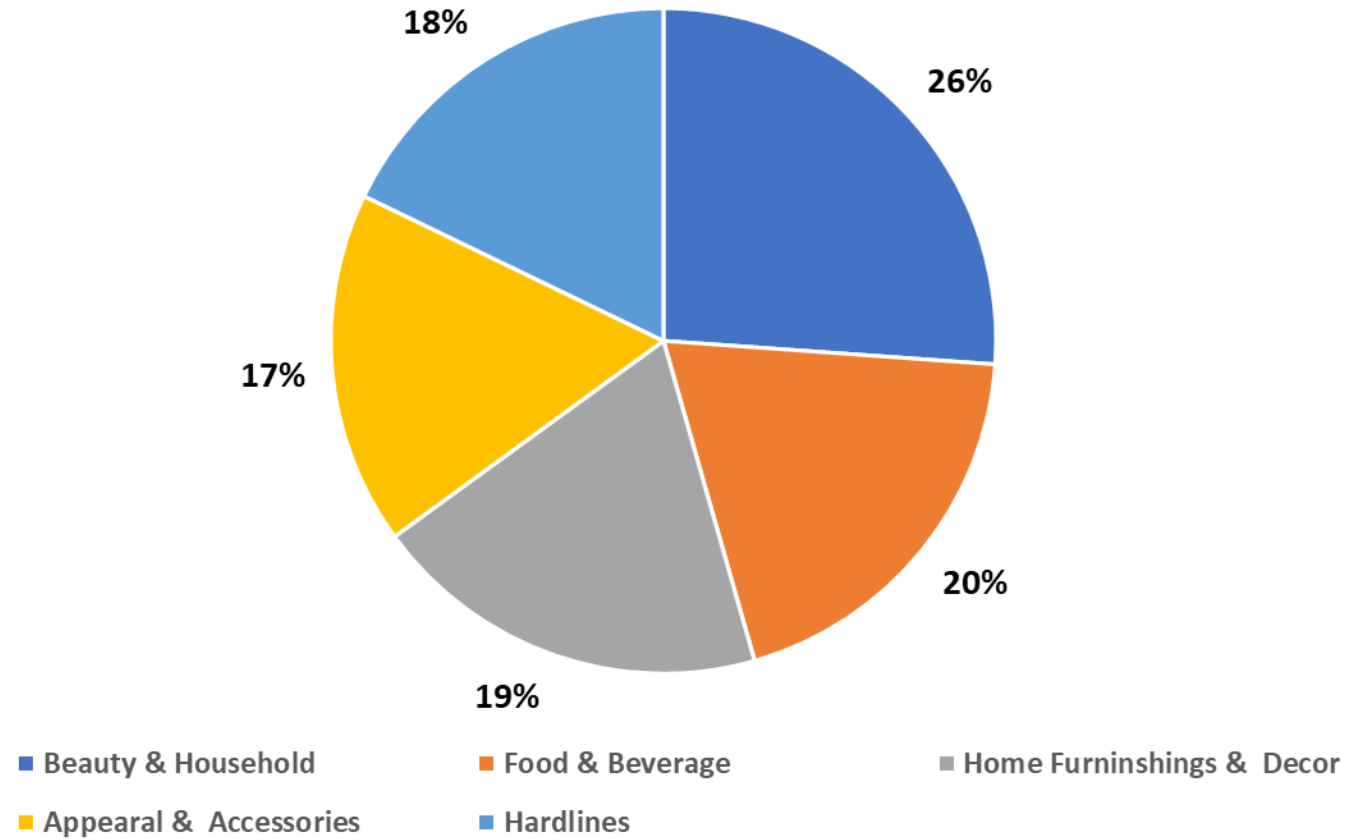
Target Inventory (billions)

43% YoY increase of Q1 2021-2022



Product Diversification

2021 Target Sales by Product Segment (millions)



Valuation

Cash Flow Problem

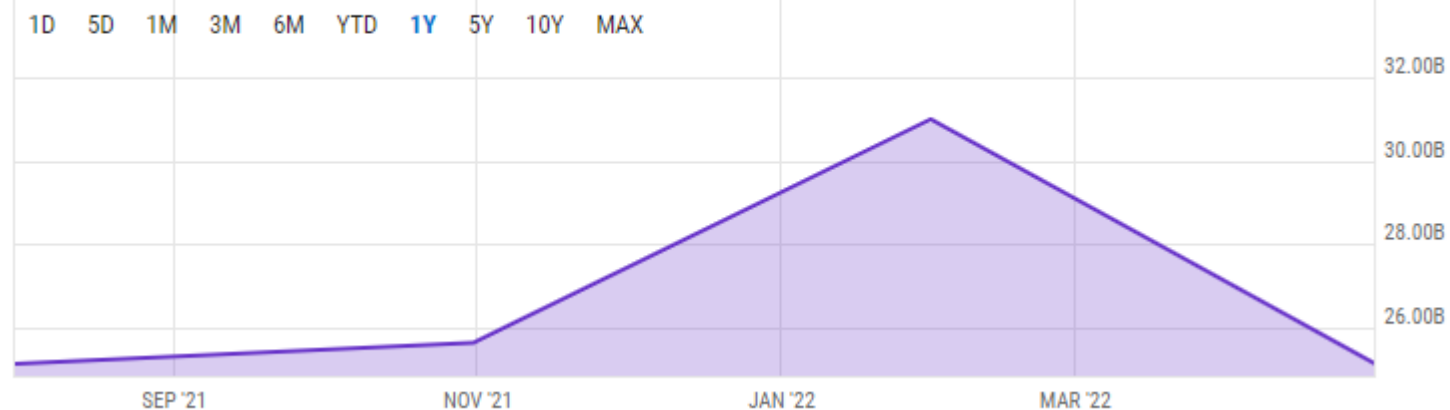
Account	2018	2019	2020	2021	2022
A/R - Million of \$	0	0	498	504	518
A/P - Billions of \$	8.67	9.76	9.92	12.86	15.48
Inventory - Billions	8.597	9.497	8.992	10.65	13.9
Short Term Investments	2.634	1.556	2.577	8.511	5.911



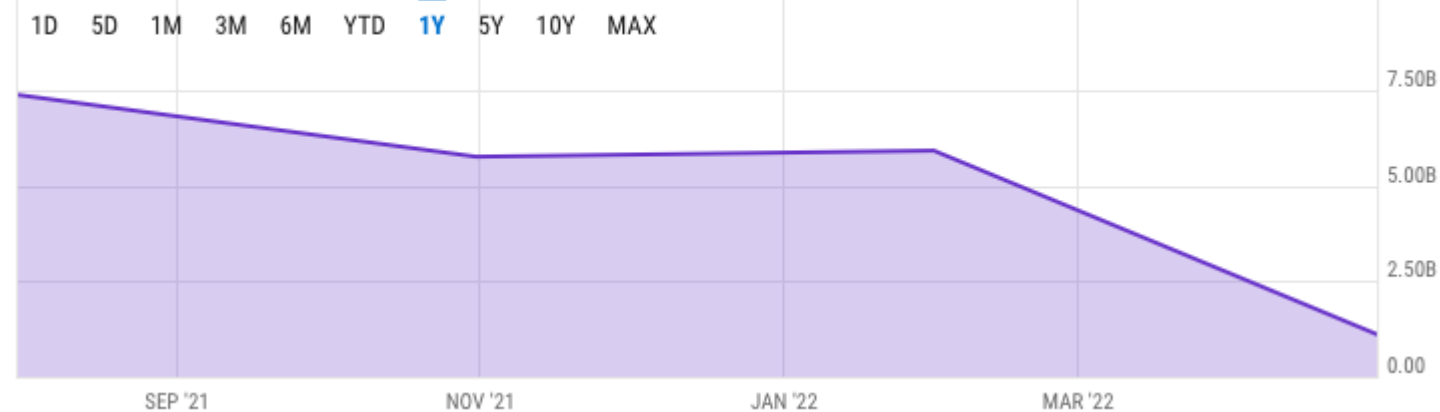
- Financial analysis shows their inventories are increasing, their account receivables are increasing, and the account payables are increasing.
- In order to combat this storm, they are using short-term investments to stay afloat financially.

Valuation

Revenue (Quarterly)



Cash and Short Term Investments (Quarterly)



Key Ratios

Debt/Equity 1.34

LT Debt/Equity 1.20

Quick Ratio .10

P/E 12.13

Forward P/E 11.89

Catalyst

- 1) Target has increased their dividend four straight years at a rate of 8-cents per year. The reason for this is to make their stock more attractive despite the **dire cash flow** and demand problem they are facing currently.
- 2) They are trying to entice their investors with a higher return despite the higher risk that is occurring. Therefore, we anticipate that Target will **announce a decrease** in their dividends or halting their dividend in their next declaration announcement.
- 3) We anticipate that the data from the CPI that is to be released will be negative and will **initiate a sell off further**.



Risk Factors

Risk 1: TGT dramatically expands its operations with national brand partnerships and additional sortation centers.

Risk 2: Their digital transformation outpaces and outcompetes the transformations of similar retail and other providers, such as AMZN.

Risk 3: Improved sales and reach through diversified store types across the United States.



Risk Factors

Worst-Case Scenario: A combination of near-term enhanced digital outreach, greater reach of operations, and increased stores, as well as an improvement to margins through a decrease in SG&A, could potentially significantly increase the stock's price if paired with a large surplus of consumer demand for the upcoming seasons.

Mitigations: We could mitigate these risks by purchasing call options, shorting competitors attempting to hold digital dominance, or longing a retail fund or ETF.





Summary

- 1) We strongly recommend to SHORT TGT due to:
 - a) Increasing inventory levels
 - b) Macroeconomic effect on demand
 - c) Inefficient ability to succeed in the digital environment compared to retailers and competitors.

 - 2) Paired with an inability to perform well for their attractive dividend, we expect significant drawdown and limited grounds for recovery in the next 6-12 months.
-

Futures Trade Recommendation

Futures Recommendation

Intra-Market (Calendar) Spread

1. STO ZCU2 @ \$594
2. BTO ZCH3 @ \$593
3. Spread Differential: 1 point
4. AUM: \$100,000
5. Risk per trade: 2% (\$2,000)
6. Margin allowed: <10% of AUM (\$10,000)
7. Maintenance margin: \$1,000
8. Position Size: 10 contracts (Limited to margin allowed of \$10,000)
9. Notional value per contract: $\$50 \times 594 = \$29,700$
10. Notional value for trade: $\$29,700 \times 10 \text{ contracts} = \$297,000$
11. Leverage Ratio: 306:1



Futures Recommendation

Rational:

- 1) July is usually the most critical month for the corn crop as it pollinates mid-month. Once corn pollinates, yield is determined.
 - 2)
 - 3)
 - 4)
 - 5)
 - 6)
 - 7)
-

Futures Recommendation

Rational:

- 1) July is usually the most critical month for the corn crop as it pollinates mid-month. Once corn pollinates, yield is determined.
 - 2) As corn is pollinating, market anxiety about the coming harvest eases
 - 3)
 - 4)
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-

Futures Recommendation

Rational:

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 - 2) As corn is pollinating, market anxiety about the coming harvest eases
 - 3) If weather is not too hot or dry, yield is determined, and prices can decline sharply into harvest
 - 4)
 - 5)
 - 6)
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-

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 - 4) There is usually little to stimulate a rally before harvest and prices tend to decline into September.
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 - 6) Entomology – no new present major threats
 - 7) **Very high mathematical expectancy...**
-

Futures Recommendation

Trade Expectancy:

1) Win %:	90%
2) Average Win Amount:	\$378/contract
3) Loss %	10%
4) Average Loss Amount	\$40/contract
5) Win/Loss Ratio	9.5
6) Average Drawdown:	\$192/contract



Mathematical Expectancy
8.4

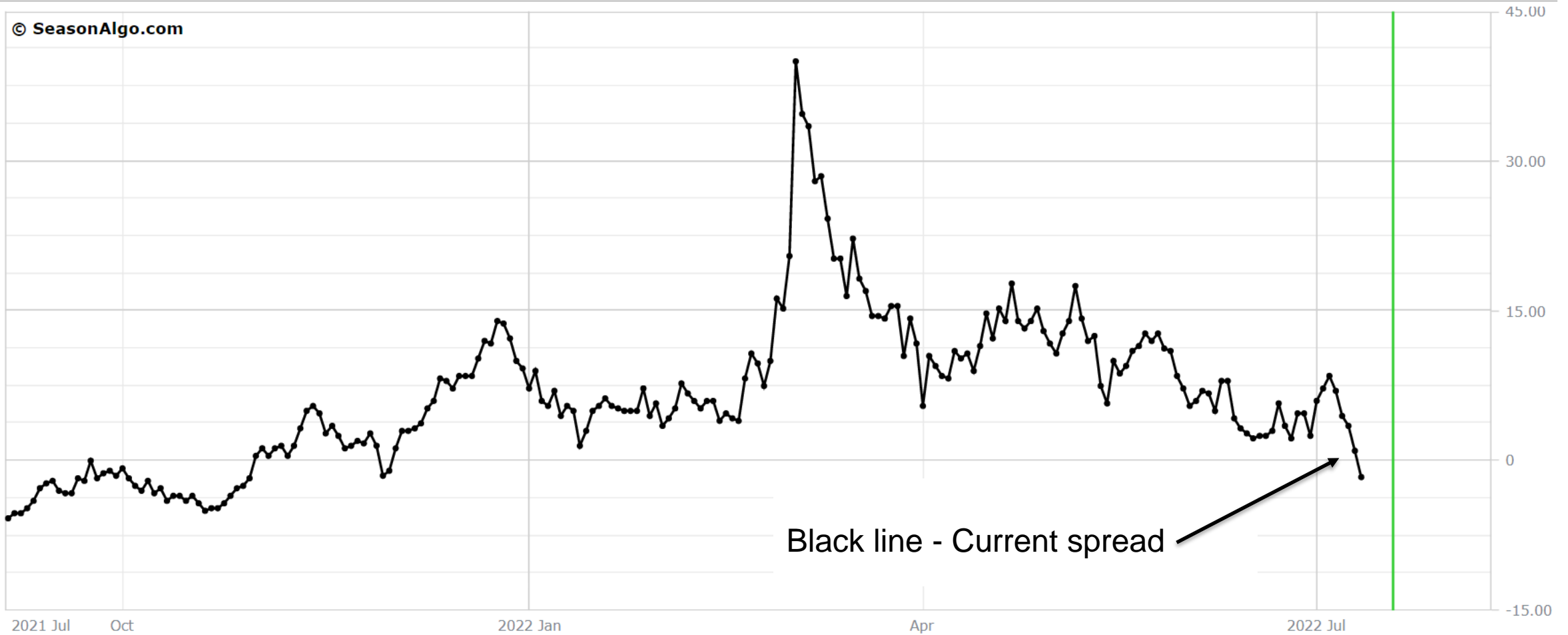
Approx. three-to-four-week trade duration

Futures Recommendation

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 - 4) There is usually little to stimulate a rally before harvest and prices tend to decline into September.
 - 5) No law interference presently
 - 6) Entomology – no new present major threats
 - 7) Very high mathematical expectancy
 - 8) [Very high current correlation...](#)
-

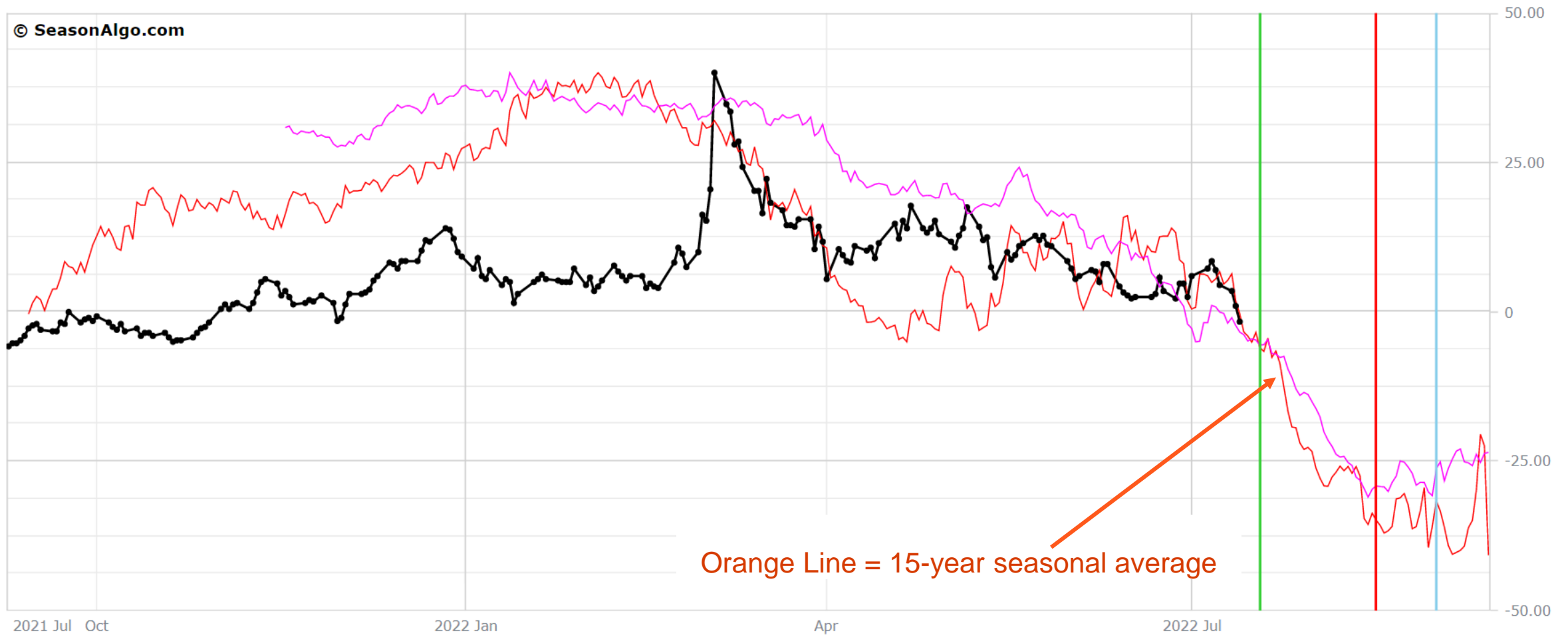
Futures Recommendation



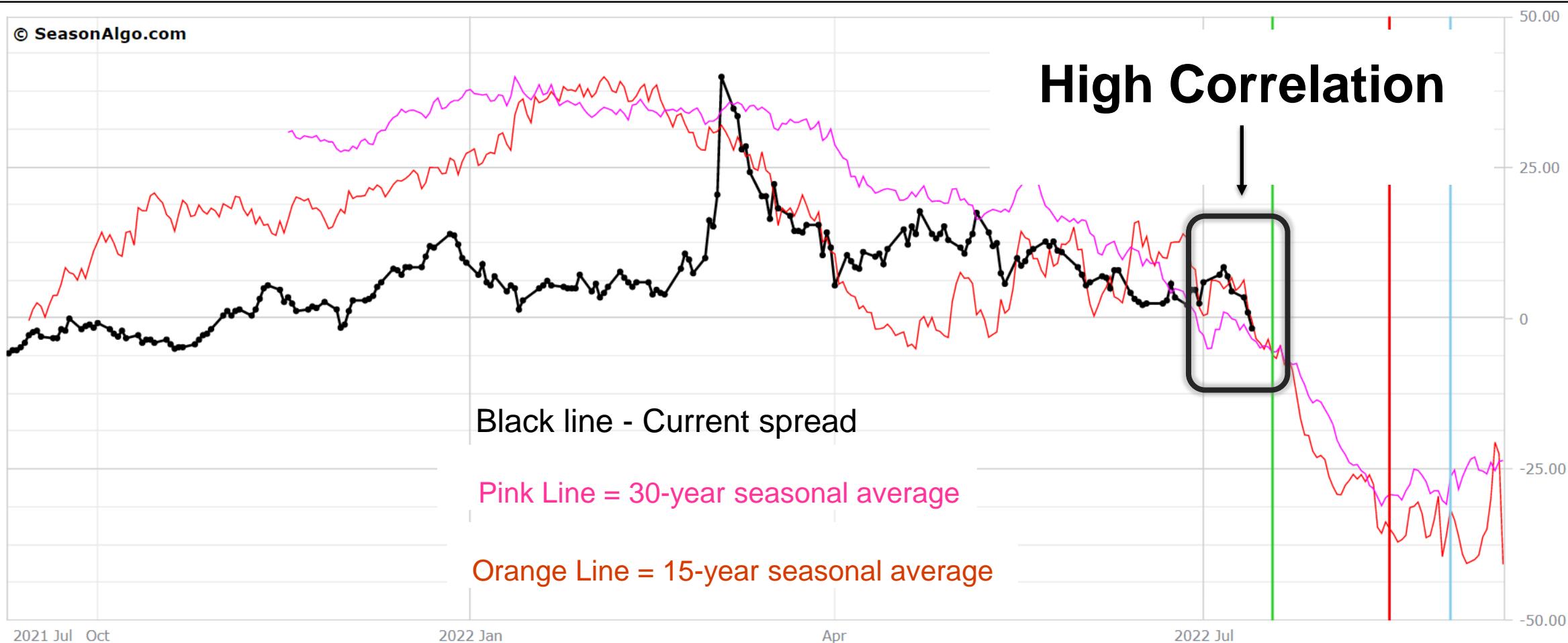
Futures Recommendation



Futures Recommendation



Futures Recommendation



Futures Recommendation

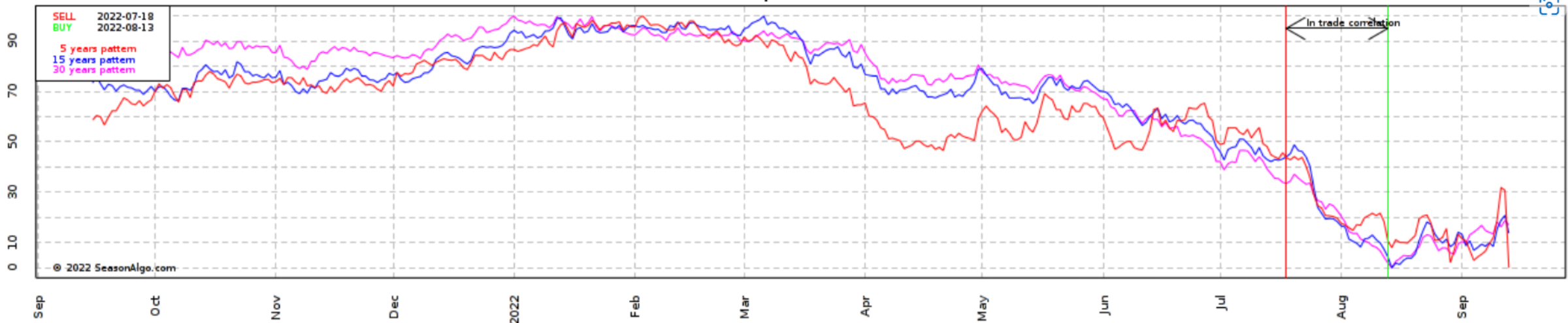
Rational:

- ✓ 5 & 15 year spread correlation = **95%**
- ✓ 5 & 30 year spread correlation = **91%**

Complete correlation

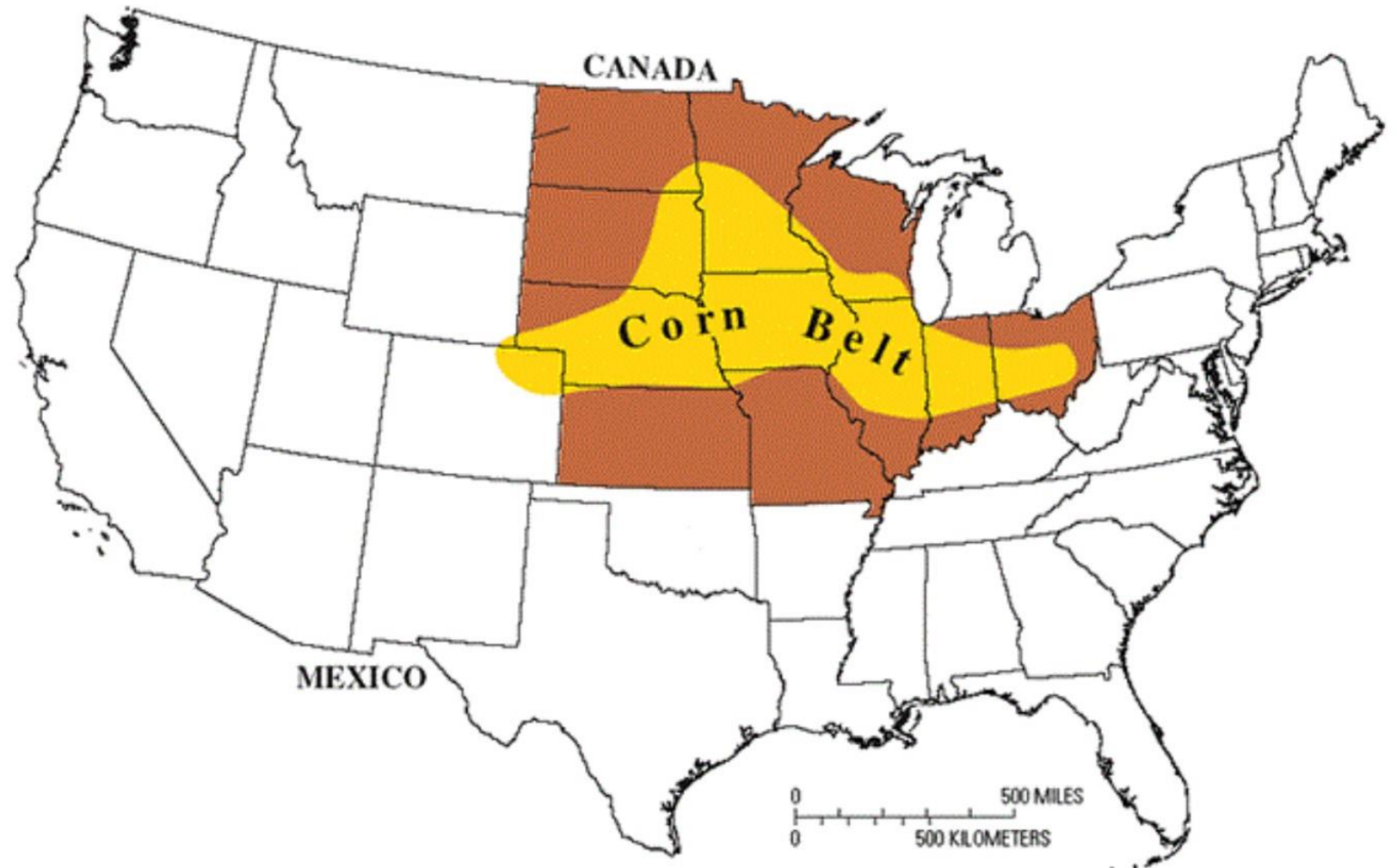
In trade correlation			
Patterns	5	15	30
5		96.95 %	83.47 %
15	95.7 %		93.08 %
30	91.85 %	96.94 %	

CU22-CZ22 patterns correlation



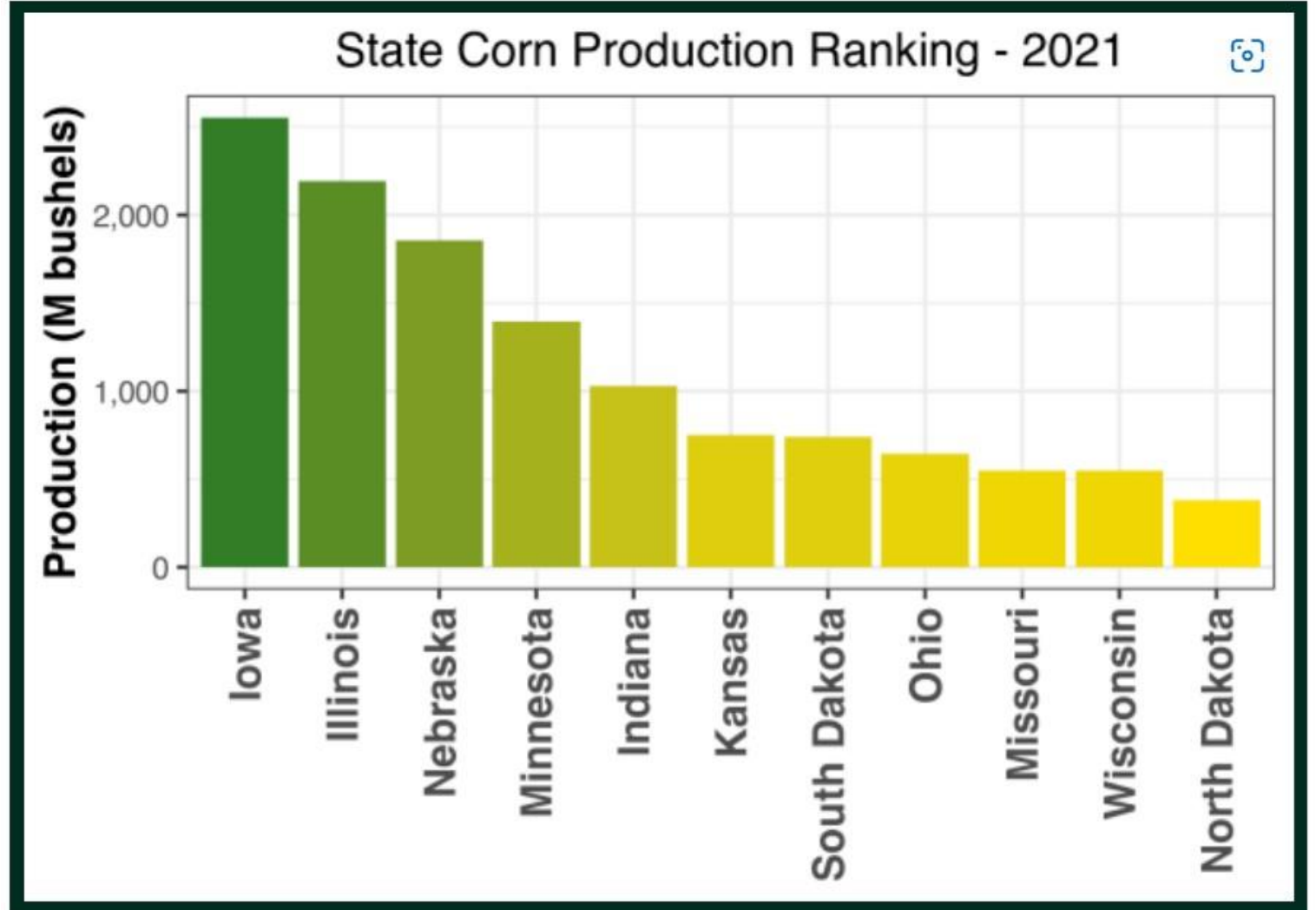
Futures Recommendation

The Corn Belt



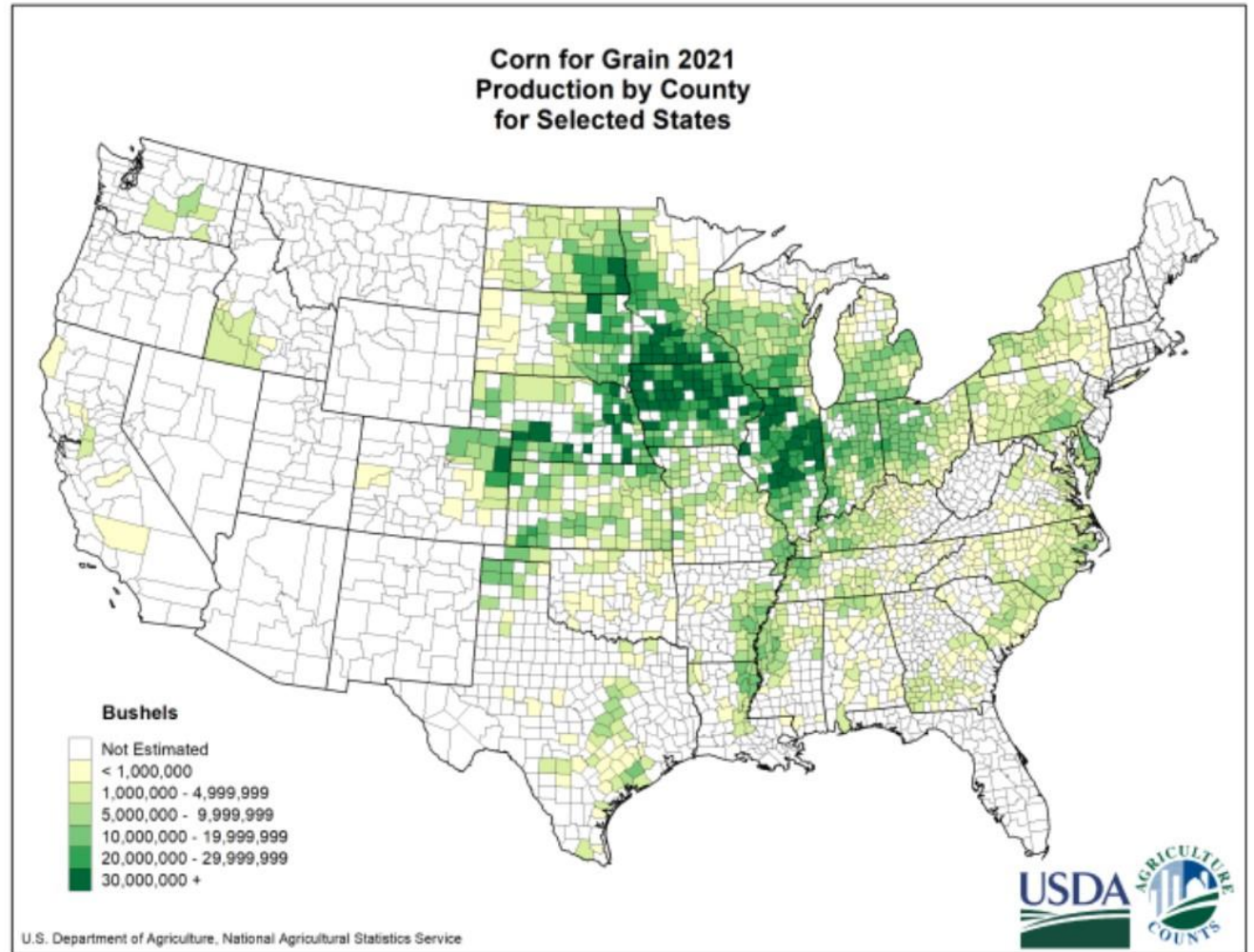
Futures Recommendation

Top corn producing
states



Futures Recommendation

Corn Production 2021

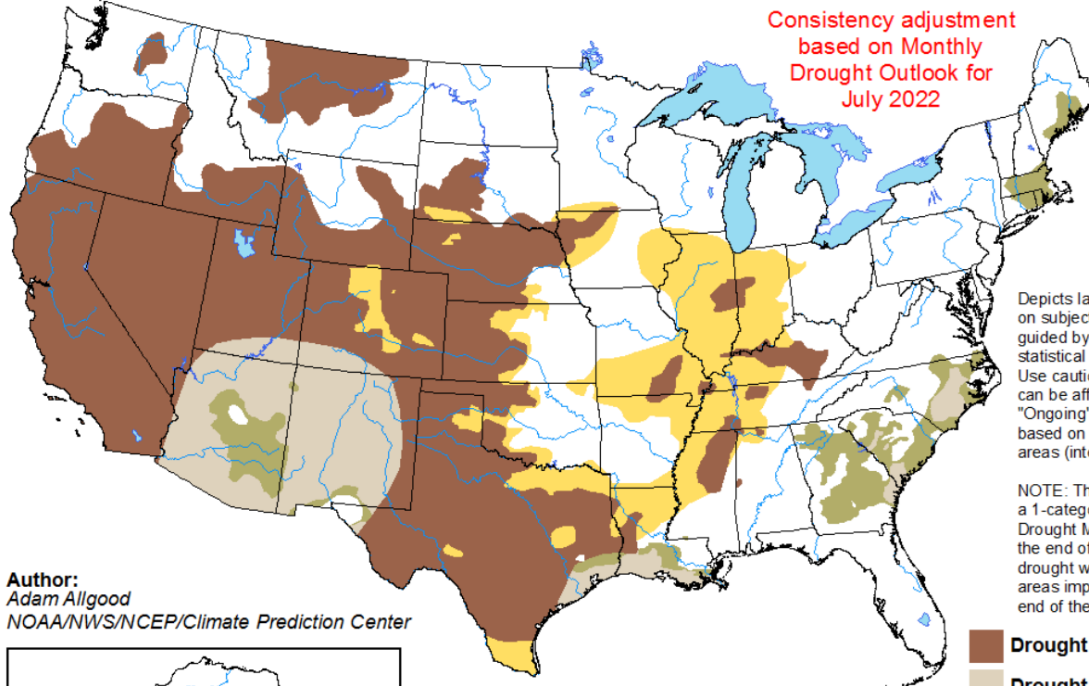


Futures Recommendation

U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

Valid for July 1 - September 30, 2022
Released June 30, 2022

Consistency adjustment
based on Monthly
Drought Outlook for
July 2022



Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

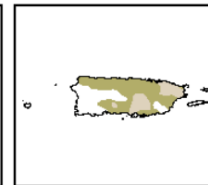
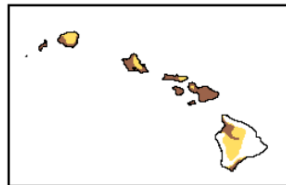
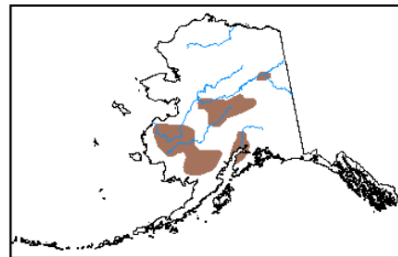
NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

- Drought persists
- Drought remains but improves
- Drought removal likely
- Drought development likely



<http://go.usa.gov/3eZ73>

Author:
Adam Allgood
NOAA/NWS/NCEP/Climate Prediction Center



Futures Recommendation

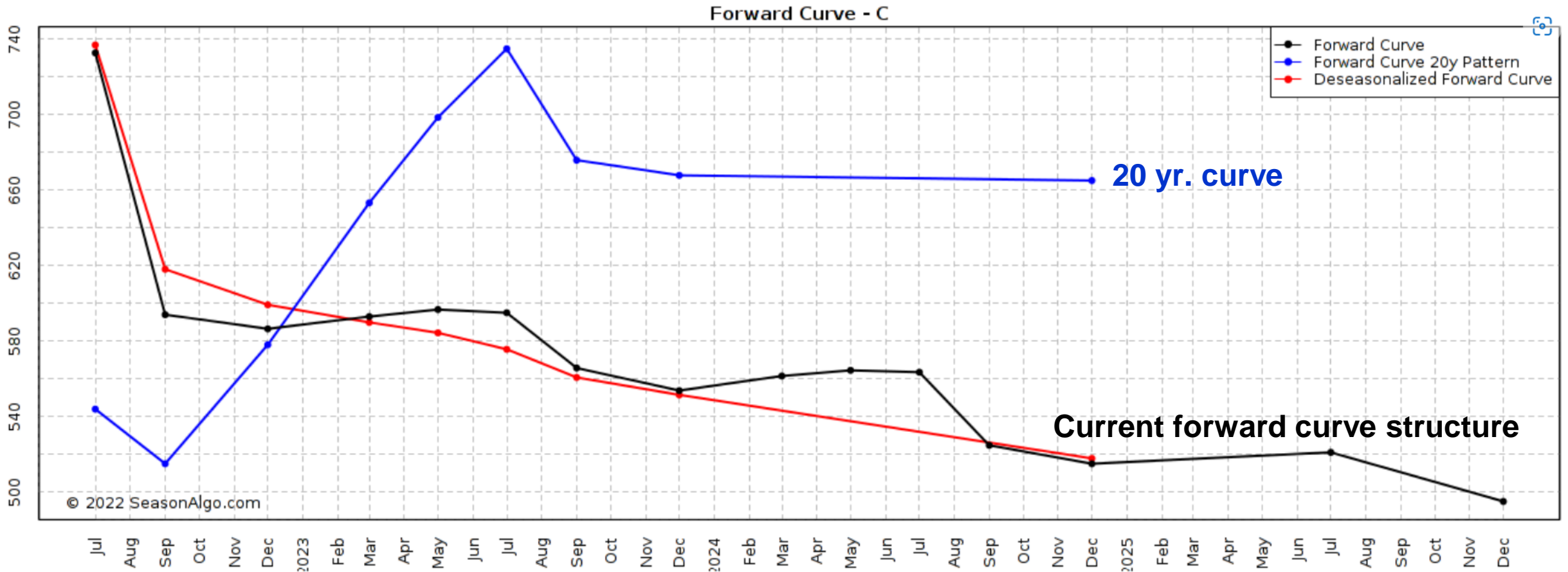
Concerns:

- 1) Extreme weather reduces pollination.
 - 2) Logistics and supply chain disruptions
 - 3) Will the Russian invasion change the forward contract structure (contango/backwardation)?
 - 4) Will the inflation on Corn recently influence structure (contango/backwardation) in a negative way?
 - 5) Possible threats from pests (Cutworms, aphids, thrips, rootworms)
-

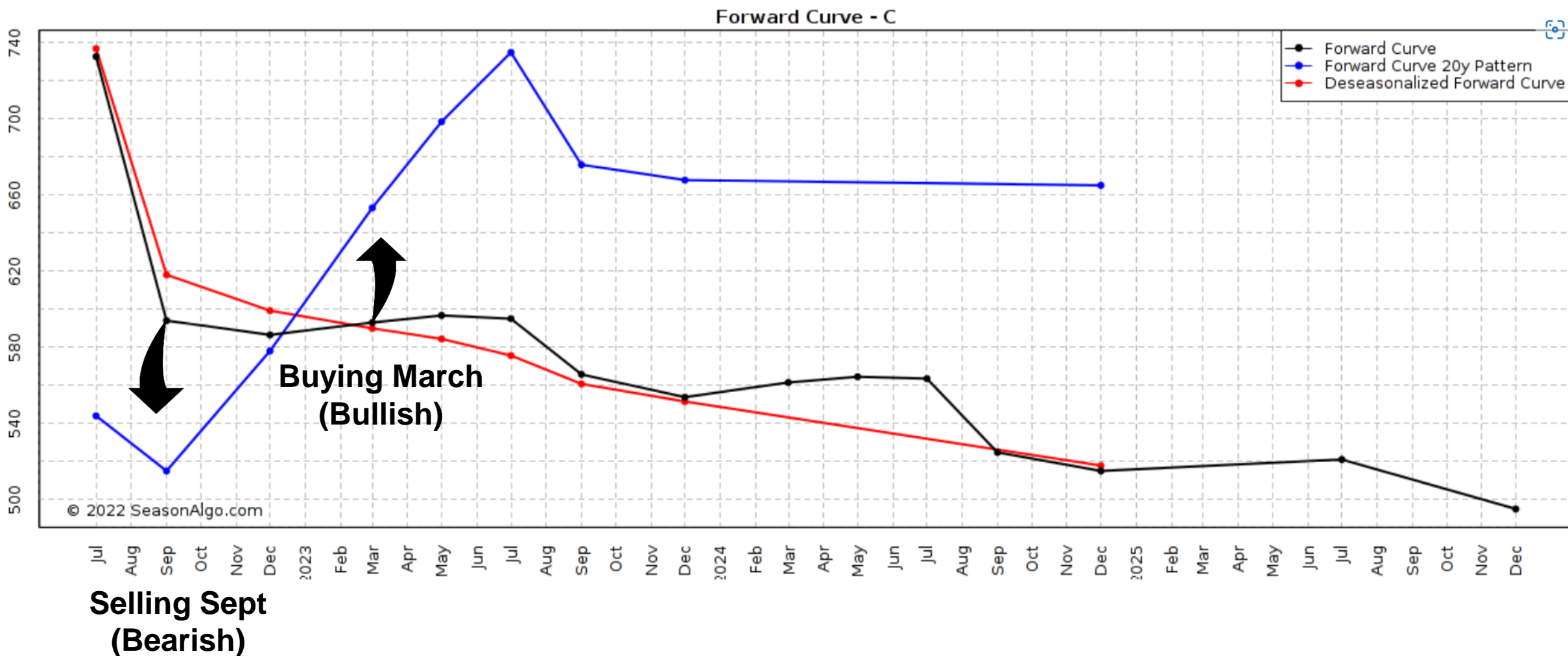
Futures Recommendation



Futures Recommendation



Futures Recommendation



Futures Recommendation

SUMMARY:

- 1) STO ZCU2 @ \$594
- 2) BTO ZCH3 @ \$593
- 3) Position Size: 10 contracts
- 4) Entry: at or around \$1-2 spread or lower, Monday July 18th to July 22nd, 2022
- 5) Exit for profit: \$4,500 (\$450/contract)
- 6) Exit for loss: Stop loss set at \$2,000 (\$200/contract)
- 7) If trending let profits run to \$6,000+ range
- 8) If stalling exit 50% of position at \$3,000-\$4,000 range
- 9) Mandatory exit: before FND (Aug 31st)



Options Recommendation

Options Recommendation

Market: Natural Gas

Ticker Symbol: NGZ2

Time Frame: August to early September

Type of Trade: Vertical Debit or Credit Spread (depending on IVR)

Action: Take a Long position in Support in late August or early September

Options Recommendation

AUM: \$100,000

Risk per Trade: \$2,000 (based on 2% of AUM)

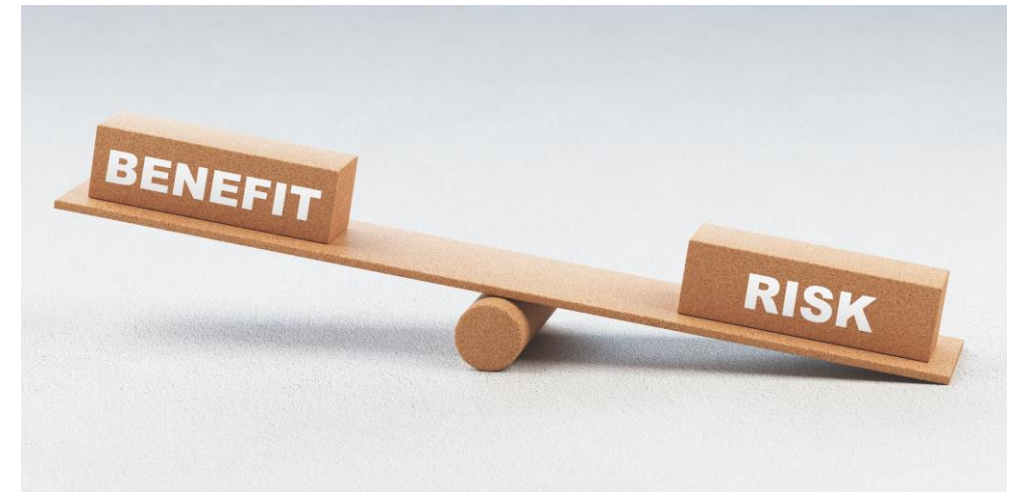
Maintenance Margin: \$7,700

Maximum Margin Allowed: 10% of AUM (\$10,000)

Position Size: 1 contract

Leverage Ratio: 10:1 (Credit Spread) 6:1 (Debit Spread)

Notional Value/contract: $\$10,000 * 6.3 = \$63,000$



Options Recommendation

Rational

- 1) Winter is the primary season for Natural Gas consumption
- 2) Natural Gas is used to heat homes/offices during cold winter months
- 3) Supply builds up prices higher into winter



Options Recommendation

Rational (cont.)

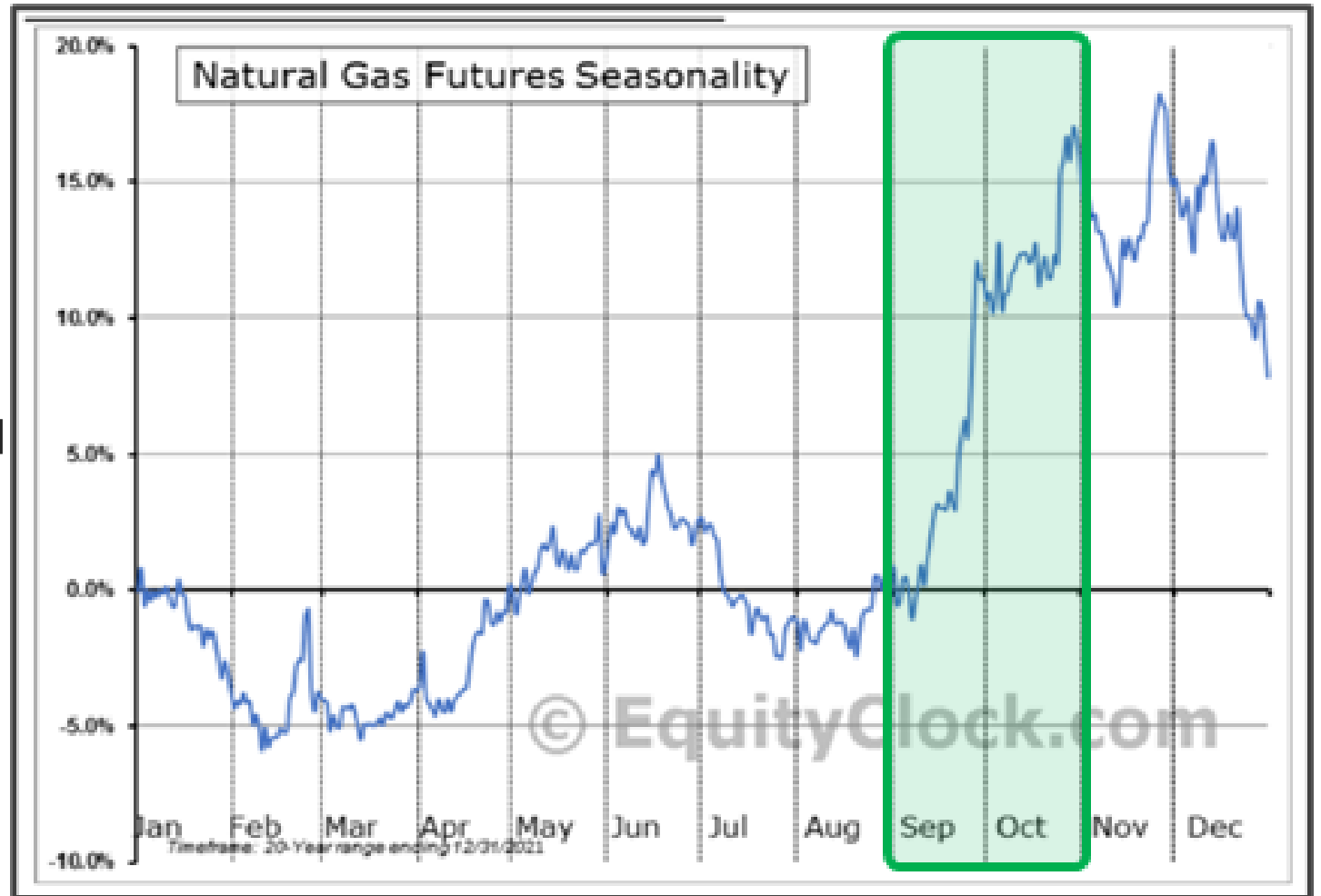
- 4) Nord stream conflict – Russia shutting off gas to Europe. “Our gas, our rules”!
- 5) Possible demand increases due to war (Russia/Ukraine)



Options Recommendation

Rational (cont.)

- 6) Very bullish seasonal rhythm
- 7) Strong expectancy
- 8) High probabilities
- 9) High percentage gain expected



Options Recommendation

Quantitative Analysis (20 years)

September:

Win %: 65%
Average Win Amount: 9.9%

October:

Win %: 70%
Average Win Amount: 6.2%

Monthly Averages over past 20 years:												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
% Return	-3.7%	-0.9%	1.7%	3.7%	1.3%	1.7%	-1.6%	0.8%	9.9%	6.2%	0.3%	-5.5%
Gain Frequency	40%	45%	55%	75%	50%	40%	30%	55%	65%	70%	50%	40%

Options Recommendation

Concerns:

- 1) Extreme weather (hurricane in southern LA (Henry Hub).
- 2) Will the Russian invasion change the forward contract structure (contango/backwardation)?
- 3) Will the strong seasonal rhythms change this year?
- 4) Possible recession will decrease demand slightly, but people will still need heat.

Solutions:

- 1) Pay close attention to seasonal rhythm correlation shifts
 - 2) Pay close attention to geopolitical events (Russia/Ukraine mostly)
 - 3) Have stop loss set as GTC at \$2,000
-

Options Recommendation



Entry area:

~ If IVR is high, use Short Put Vertical Credit Spread

~ If IVR is low, use Bull Call Debit Spread

Options Recommendation



Exit area:

~ If using Short Put Vertical Credit Spread, exit at 50% of credit

~ If using Bull Call Debit Spread exit below 8.000

Discussion Q&A

Thank you