

## The Importance of Price Risk Management How to Protect Your Bottom Line

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July 9<sup>th</sup>, 2021





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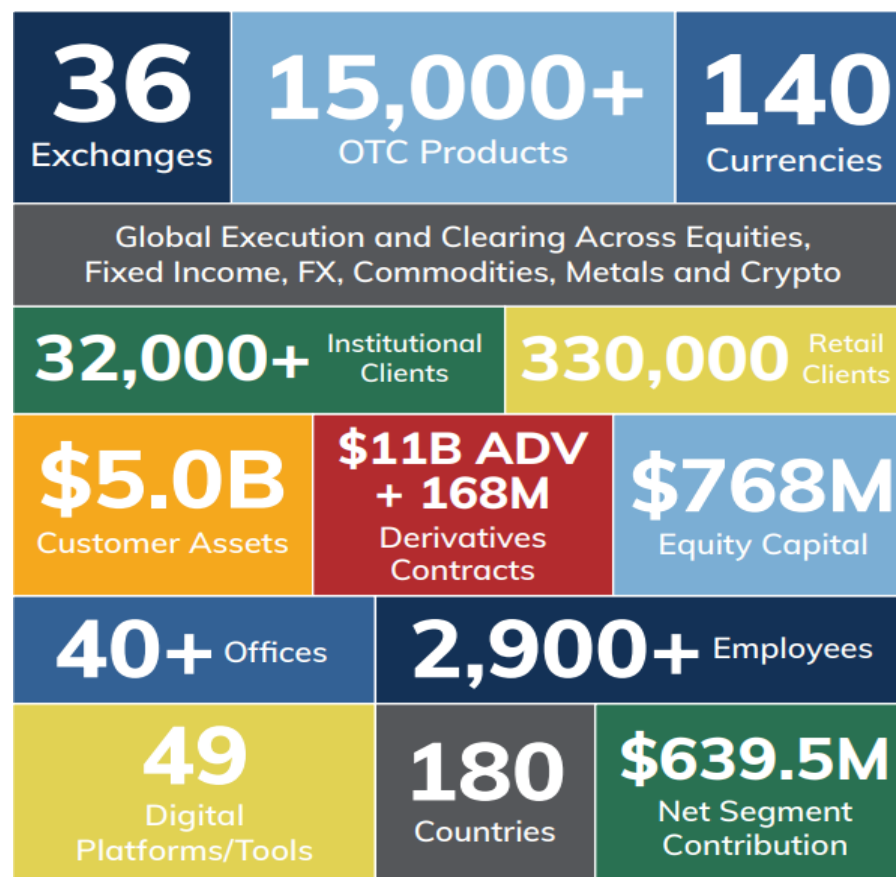
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A horizontal bar at the bottom of the page, composed of several colored segments: dark blue, light blue, green, yellow, orange, and red.



## Who are we?





## DIVERSE AND RESILIENT BUSINESS MODEL





## Importance of Price Risk Management

Success  
Favors  
the  
Prepared

Success  
Also Favors  
those  
Willing to  
Change



## How often do “Bad Days” Occur?

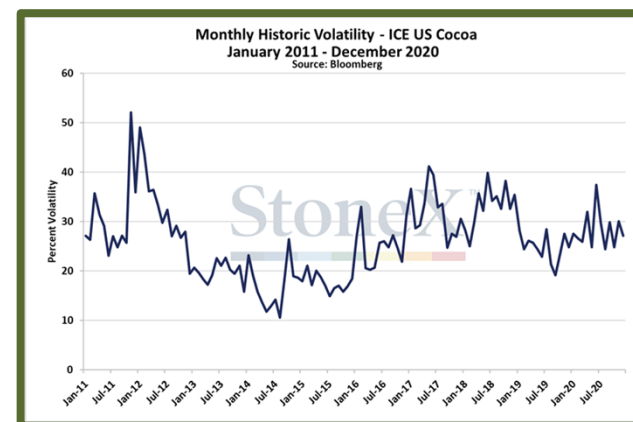
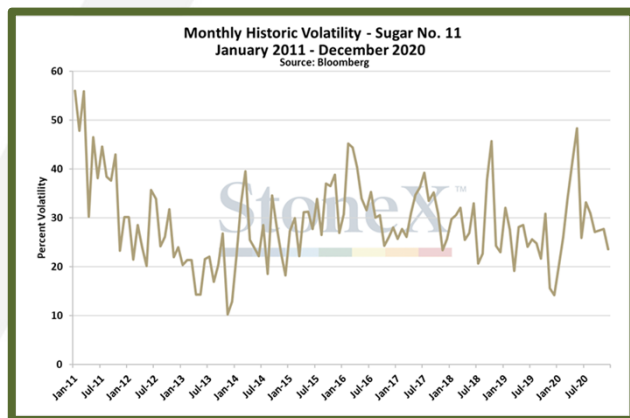


Lets think about this...

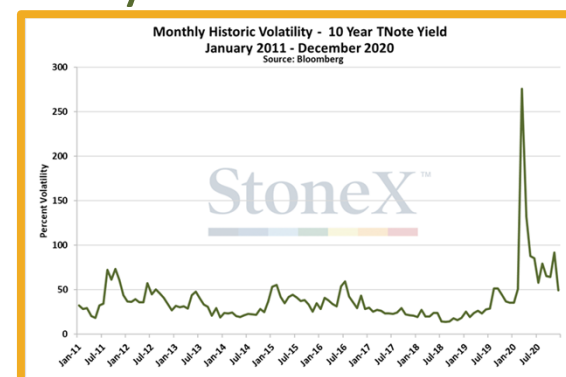
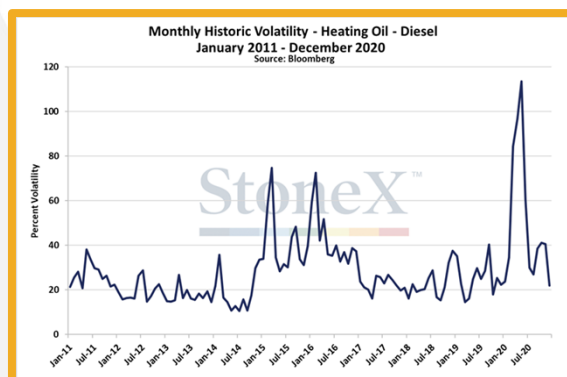
We **Instinctively and Routinely** **PAY** to manage risks regardless of the likelihood of their incidence?



# What is Volatility?



## Measure of Your Market Risk & Market Opportunity





# Volatility

## Simply Stated

**Example: July 2021 Heating Oil/Diesel\* at 1.50/Gallon**

Compare Market Volatility: 20%, 30% & 40%

"If" Annualized Volatility	68% Probability Price Range
20%	\$1.20 - \$1.80
30%	\$1.05 - \$1.95
40%	\$0.90 - \$2.10

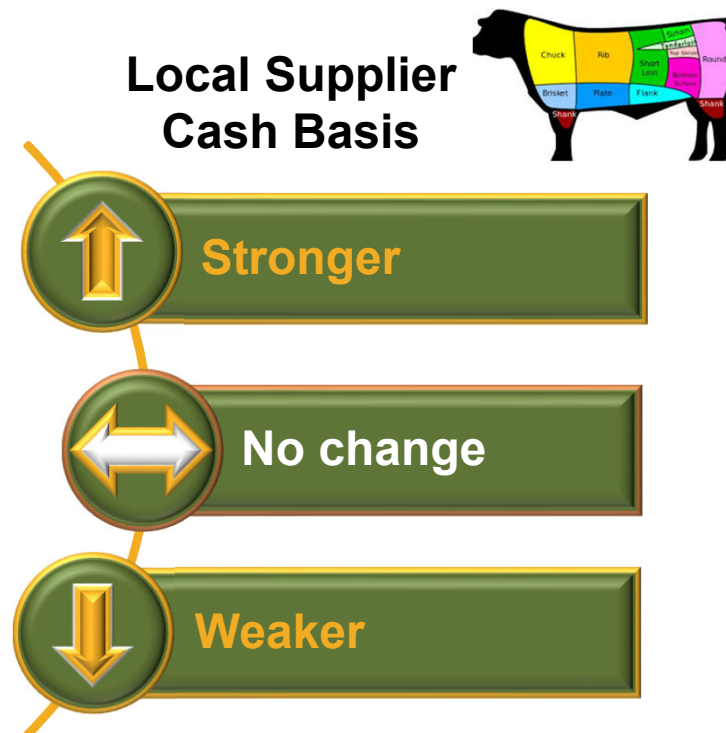
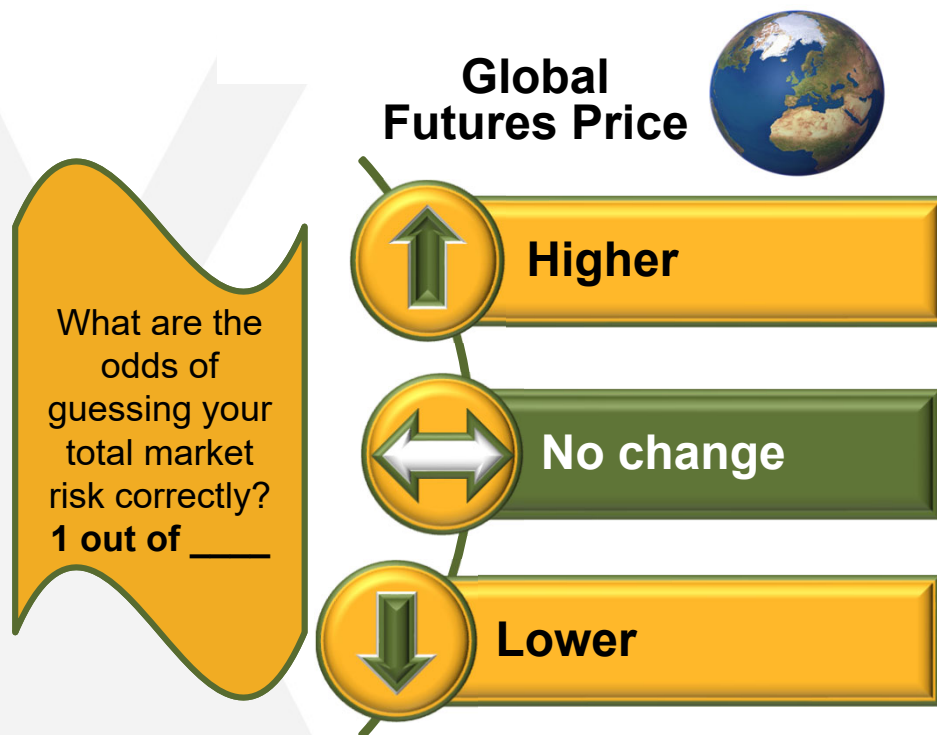
**At which volatility level is **your risk** the greatest?**  
**At which volatility level is **your opportunity** the greatest?**

Note: 2 Standard Deviations is 95% Probability and 3 Standard Deviations is 99% probability

\* Contract: NYMEX NY Harbor ULSD (Ultra Low Sulfur Diesel) – 42,000 Gallons



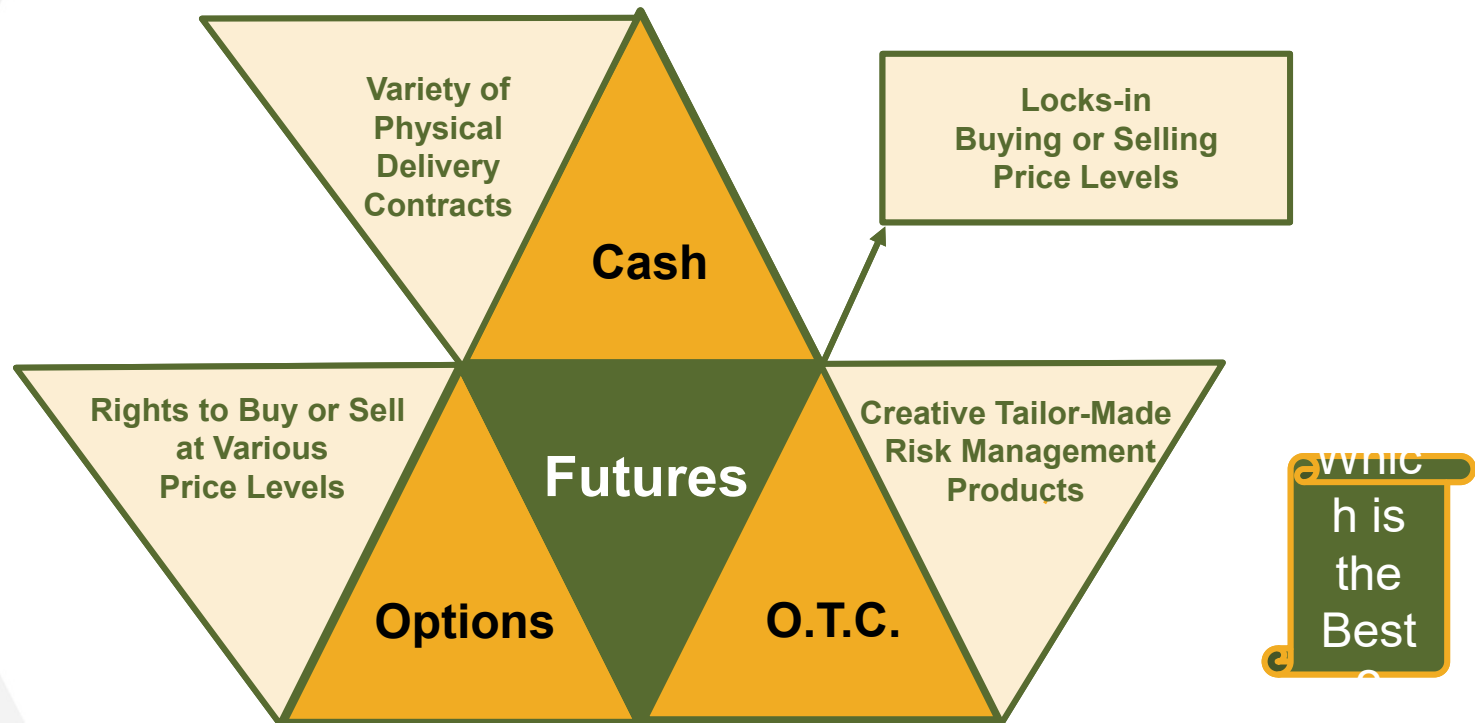
## Total Market Exposure





# Futures: Epi-Center of Risk Management

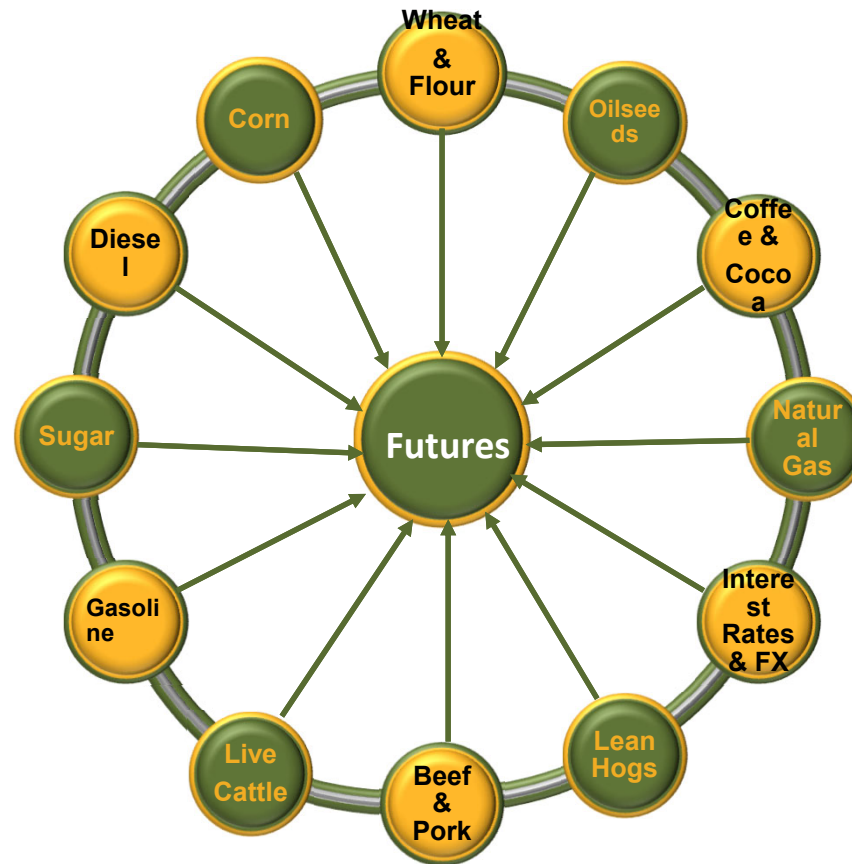
## Markets Available to Food & Beverage Firms



\*OTC products are designed only for individuals or firms who qualify under CFTC rules as an 'Eligible Contract Participant' ("ECP") and who have been accepted as customers of StoneX Markets (SXM).



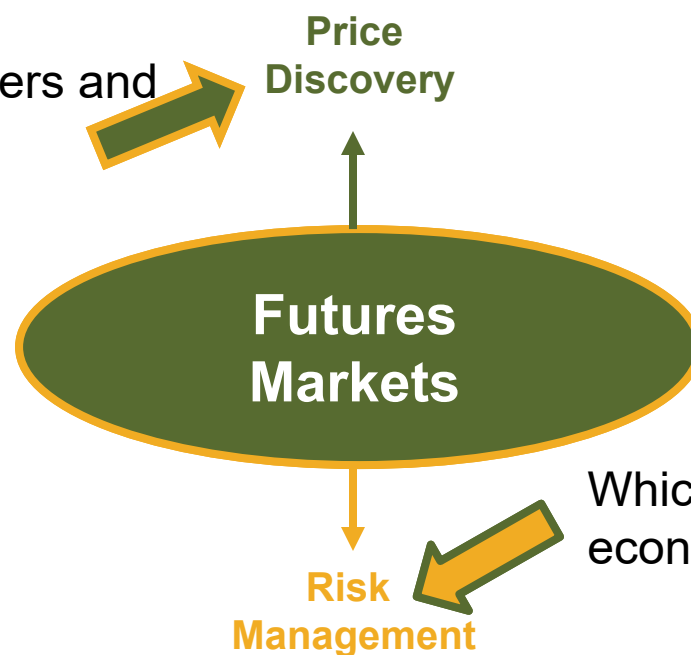
## Where Do Ingredient & Input Prices Come From?





## Economic Functions of Futures

Which function has the most direct impact on Producers and Consumers?



Which is the most important economic function?



# Corn hedge for consumer

1. **Hedge:** Buy CZ22 futures are \$4.00;
  - Lock in flat price hedge once we reach a value target in accordance with risk management guidelines
  - \$4 will be our financial hedge price using either futures or call options plus/minus basis. If options were used, also include the option premium to the final price.
  - Locking in prices on the forward curve allows you (the consumer) to lock in advantageous prices to protect against

higher prices later on.

NOT TRADEABLE.  
 EXAMPLE ONLY.  
 Futures contracts are the most straight  
 forward hedging mechanism  
 DOES NOT INCLUDE  
 COMMISSION AND  
 FEES

Corn (feed) Buyer Hedge Mentality

INTL FCStone





## Energy Hedging

➤ Fixes the price and monthly quantity of the physical fuel for delivery during a specific time frame.

➤ Time frame can be a month specific or as a strip, over consecutive months.

In this example we will assume that you sold a Fixed Forward Contract for October – December delivery ULSD at a price of \$2.4500 per gallon. For reference the NYMEX HO Nov-Jan average price is \$2.2400.

Market moves \$1.00 higher: NYMEX to \$3.2400 / physical price to \$3.4500.

October – December fixed \$2.4500

Non-protected price \$3.4500

Customer Pays \$2.4500

**NOT TRADEABLE:  
EXAMPLE ONLY. DOES  
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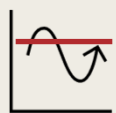


## USD Interest Rate Hedging

%

It may be easy to ignore interest rate risk when floating rates are low, but don't wait too long  
Long term rates are already on the rise and short-term rates are close behind

**Protect your balance sheet with a proactive, balanced hedging approach**



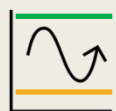
Interest Rate Swaps



Custom Amortizing Schedules  
Term Loan Hedging out to 15 years  
Operating Line Hedging out to 10 years



Market Intelligence Services  
Complete Product Training  
LIBOR and SOFR Available



Interest Rate Options



Interest Rate Cap and Floor Options  
Interest Rate Collars  
Advanced Spread Strategies



Market Intelligence Services  
Complete Product Training





# The Basics of FX For Commercial Clients

## The Terminology of FX Pairs

- Is the Euro the cost in U.S. Dollars of 1 Euro? Or the cost in Euro's of 1 dollar?
  - *Euro is generally EUR.USD, so it is the USD cost of 1 Euro*
  - *This makes sense- if EUR.USD moves higher, the Euro is appreciating*
  - *This is how Euro, GBP, AUD, and NZD trade*
- However the Mexican Peso is USD.MXN, it is the cost of 1 US Dollar in Pesos
  - *When USD.MXN rises, the Peso is depreciating*
  - *This is counterintuitive, but that's how most other pairs trade*
- Canadian Dollar is usually expressed as USD.CAD, but can trade either way
- CME Futures further confuses this by trading all pairs XXX.USD
  - The exchange is a tiny fraction of the overall FX market, and is irrelevant in many ways
  - We do not execute or support FX futures trading, however it can be done via the CTA Desk



# The Basics of FX For Commercial Clients

## DELIVERY

- Taking delivery is extremely common, and often the best way for clients to receive the cash they need
- Example: U.S. Grain buyer enters into a contract to pay MXN for a shipment in 6 months
  - So they sell USD.MXN six months forward (they are selling USD, buying MXN)
  - The FX forward contract requires 3-5% margin
  - When the contract goes to delivery at expiration, they must wire the full amount in USD and will receive an amount of MXN based on the exchange rate in the forward. They can then wire MXN to their bank for further payment processing

## CASH-SETTLED

- Some countries, such as Brazil, China, India, Malaysia, do not allow their currencies to trade freely in the open delivery market, these are called Non-Deliverable Forwards or NDF's
- Some clients may prefer to cash settle deliverable currencies

## MAKING PAYMENTS

- Clients often want to pay their buyer/supplier directly at the end of their hedge
- We do not currently offer this service, but likely will in the future
- Regardless: they can wire any currency from FCS to their business bank for further payment



# IHS HDPE Hedging Example



- On May 1 2020, XYZ Corp determines volume requirements for October 2020 to be 1,000,000 lbs and purchases a October 2020 IHS HDPE swap contract @ \$.4500 c/lb to protect against an increase in prices.
- On October 31 2020, the swap cash settles against the IHS index and XYZ Corp purchases the needed HDPE from the physical supplier
- The chart below reflects hedge results given a settlement of the October IHS HDPE swap for a settlement @ \$.5000 or a settlement @ \$.4000

Note: These examples exclude commission and fees.

Settlement Price at \$.5000				
DATE	FINANCIAL TRANSACTION		PHYSICAL TRANSACTION	
	BUY	SELL	BUY	SELL
MAY 1	Oct swap @ .4500			
OCT 31		Oct swap @ .5000	Oct phys @ .5000	
Result		.0500 profit	.5000 purchases	
SUMMARY: .5000 - .0500 = .4500 net cost				

Settlement Price at \$.4000				
DATE	FINANCIAL TRANSACTION		PHYSICAL TRANSACTION	
	BUY	SELL	BUY	SELL
MAY 1	Oct swap @ .4500			
OCT 31		Oct swap @ .4000	Oct phys @ .4000	
Result		.0500 Loss	.4000 Purchases	
SUMMARY: .4000 + .0500 = .4500 net cost				

Note: These examples exclude commission and fees.

NOT  
TRADEABLE:  
EXAMPLE  
ONLY

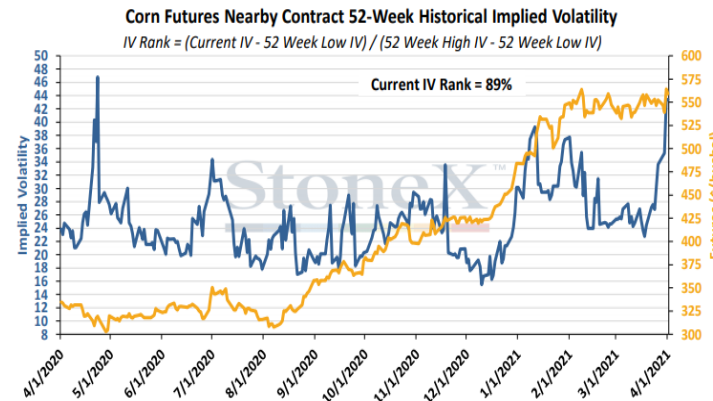
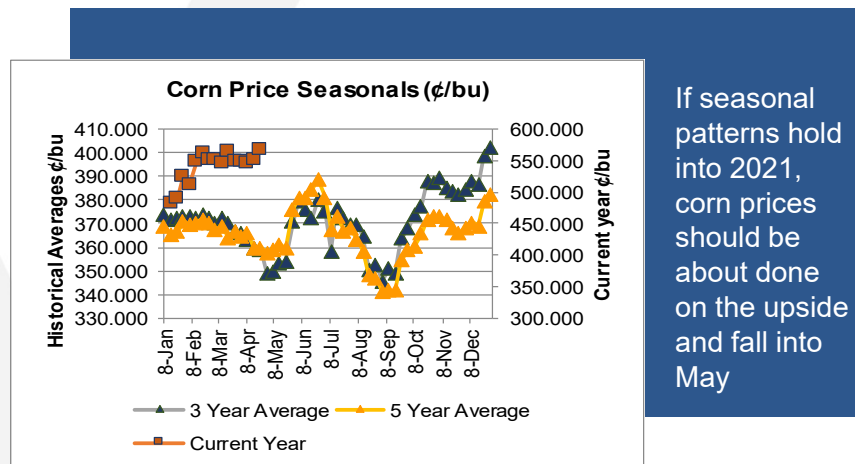


## Commodity Snapshot – Agricultural

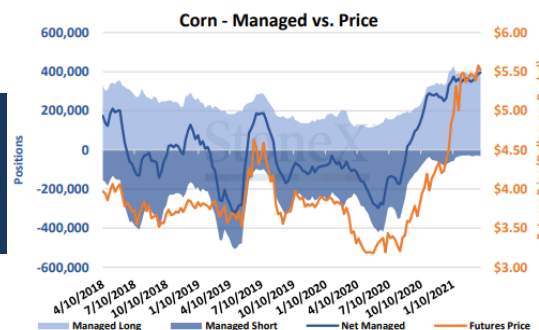
Commodity	Today's Price 4/15/21	MoM	YoY	Summary	Recommendation
Corn	5.9000	+7.37%	+84.81%	Surprise acreage number and continued strong demand will lead to further upside.	Prices above value in the 90th decile dictate the use of call options to hedge further spikes / look for next buying opportunity.
Chicago Wheat	6.5375	+1.36%	+21.01%	A stronger USD coupled with downside in corn has brought wheat prices to their lowest levels of 2021.	Prices above value in the 90th decile dictate the use of call options to hedge further spikes / look for next buying opportunity.
Paris Wheat	219.50	-1.57%	+12.71%		
Sugar #11	16.38	+1.61%	+61.22%	Values have setback considerably as demand begins to ease with the inverse coming out of the futures market.	Sugar #11 prices above value in the 90th decile dictate the use of call options to hedge further spikes / look for next buying opportunity. Sugar #5 prices are above value in the 80 <sup>th</sup> – 90 <sup>th</sup> decile. Look for further downside.
Sugar #5	455.60	-0.76%	+32.94%		
Coffee	132.70	+0.45%	+10.40%	May coffee futures had a 19.30 cent range during March posting losses of 14 cents with values erasing all gains from February changing market sentiment back to bearish.	Prices are above value in the 80th – 90th decile. Look for further downside.
Orange Juice	113.90	-2.94%	+5.17%	May FCOJ futures 10.15 cent trading range posting losses of 1.15 cents as after the mid-month rallied failed to see any follow through.	Prices are in value in the 20th – 30th decile. Look to get coverage.



## Corn Price Factors



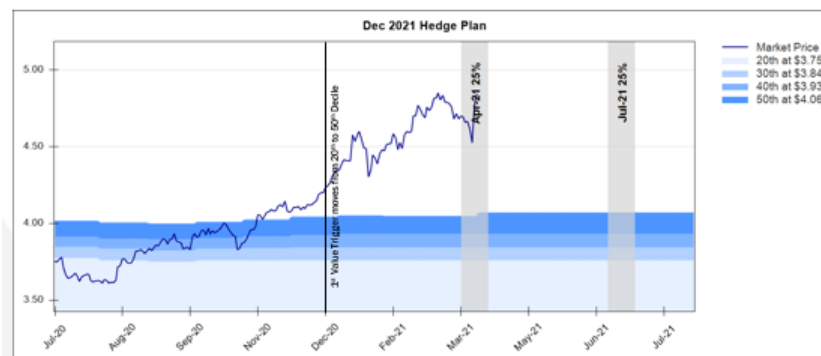
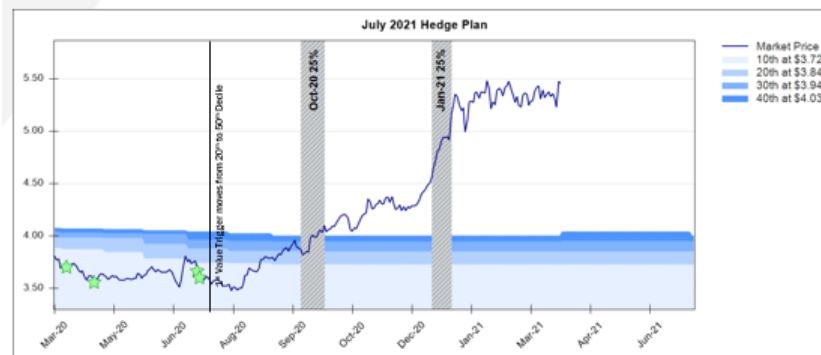
Corn historic implied volatility spiked to over 40% even with prices staying rangebound – not sure what that means



Managed commodity funds are in the “Red-Red Zone” which the past two times at those levels saw 25% or greater price corrections



# Corn – 2021





## Summary: Importance of Price Risk Management Food & Beverage Firms' Perspective





# For Information & Assistance Contact StoneX Financial Inc.



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