

INTRODUCTION TO DAIRY RISK MANAGEMENT

Clal Dairy Forum
Bardolino, Italy
May 24, 2013



CME Group

**Chicago
Mercantile
Exchange
(CME)**

**Chicago
Board of
Trade
(CBOT)**

**New York
Mercantile
Exchange
(NYMEX)**

**Commodity
Exchange
(COMEX)**

**Kansas City
Board of
Trade
(KCBT)**

CME Group Product Complexes

- **Commodity**
- **Interest Rates**
- **Foreign Exchange**
- **Equities**
- **Alternative Investments**
- **Energy**
- **Metals**

What is your Risk Exposure?

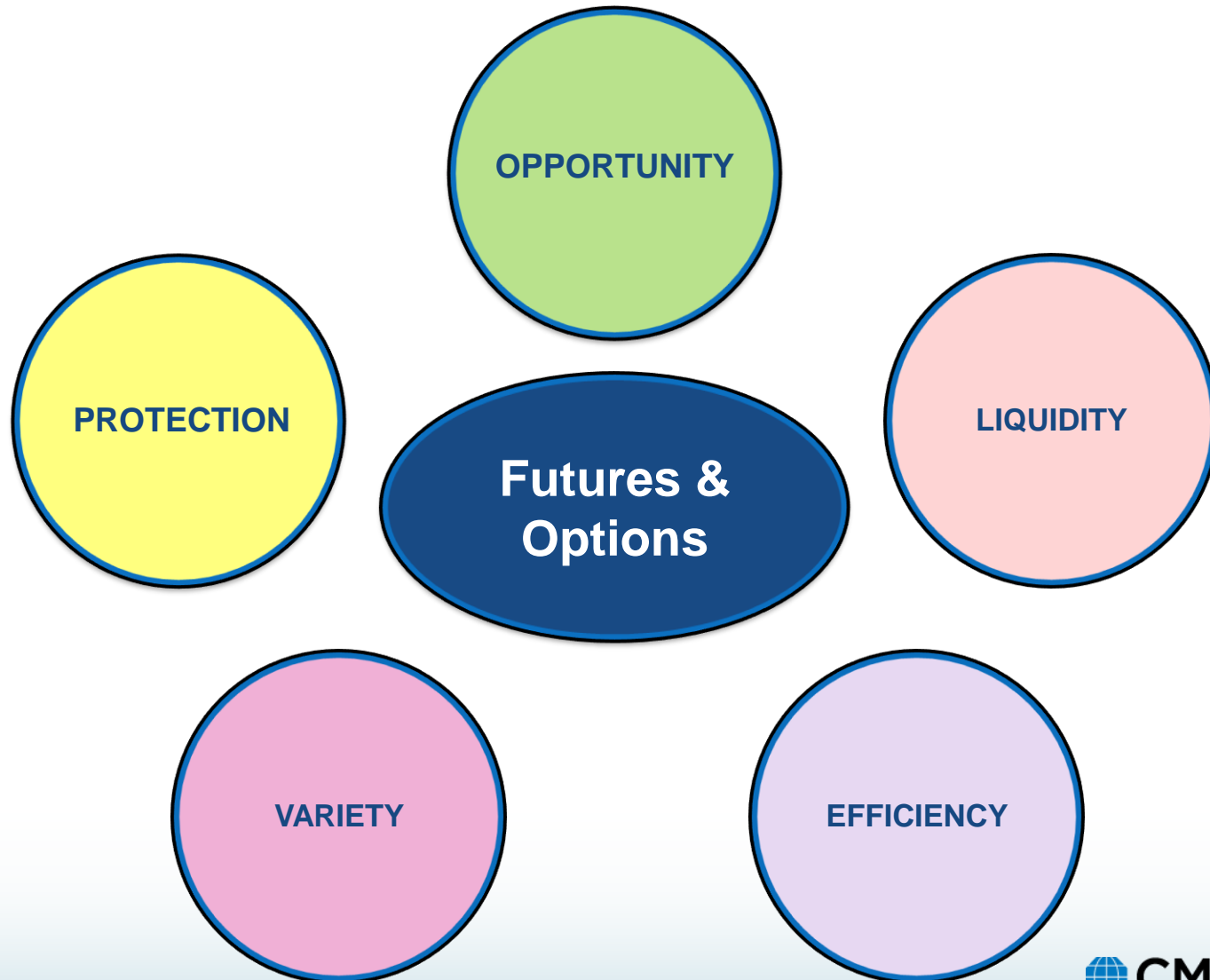
Commodity Prices

Energy Costs

Financial Portfolio

Currency Fluctuations

Benefits of Dairy Futures & Options





CHOOSE

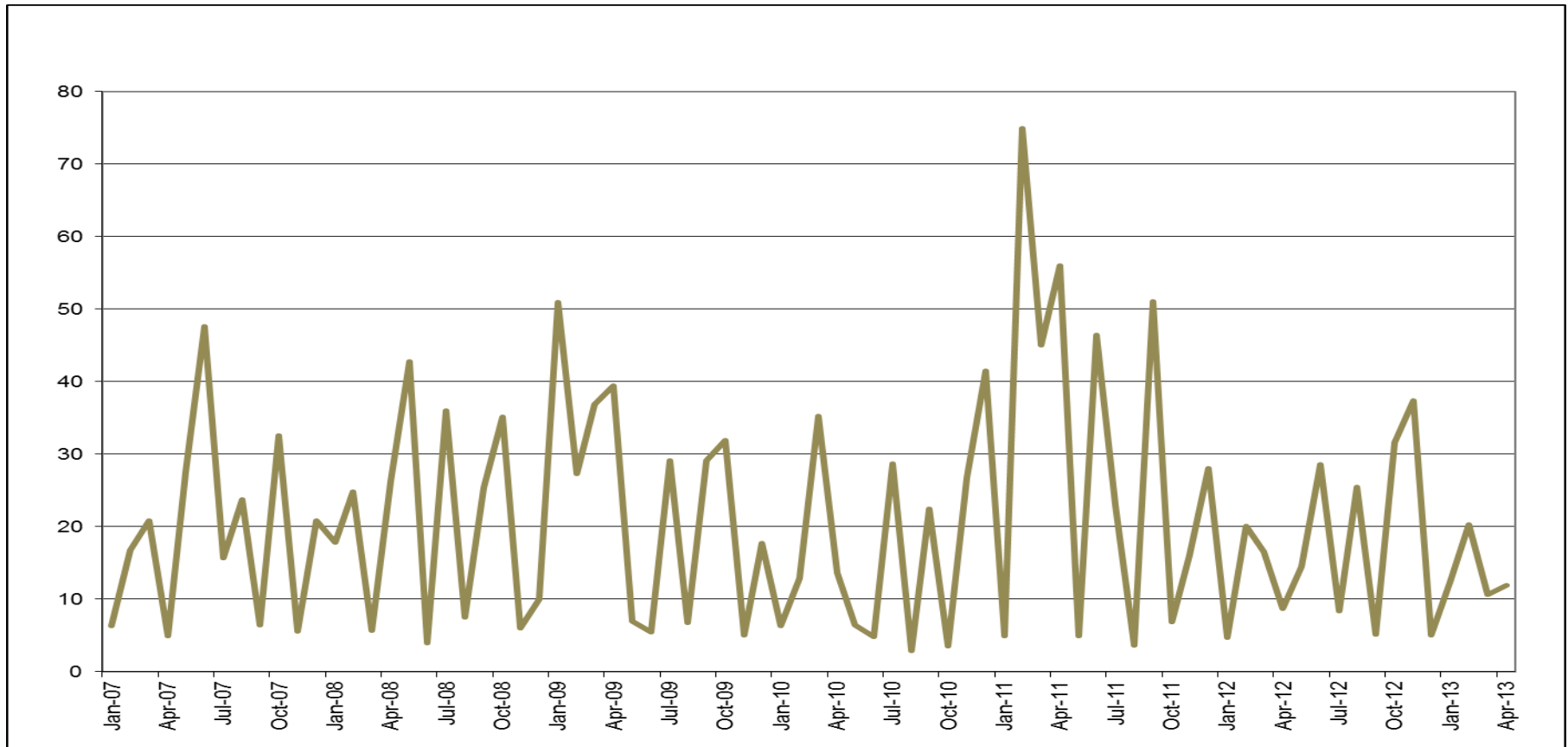
PROTECTION

Agricultural
Futures and Options

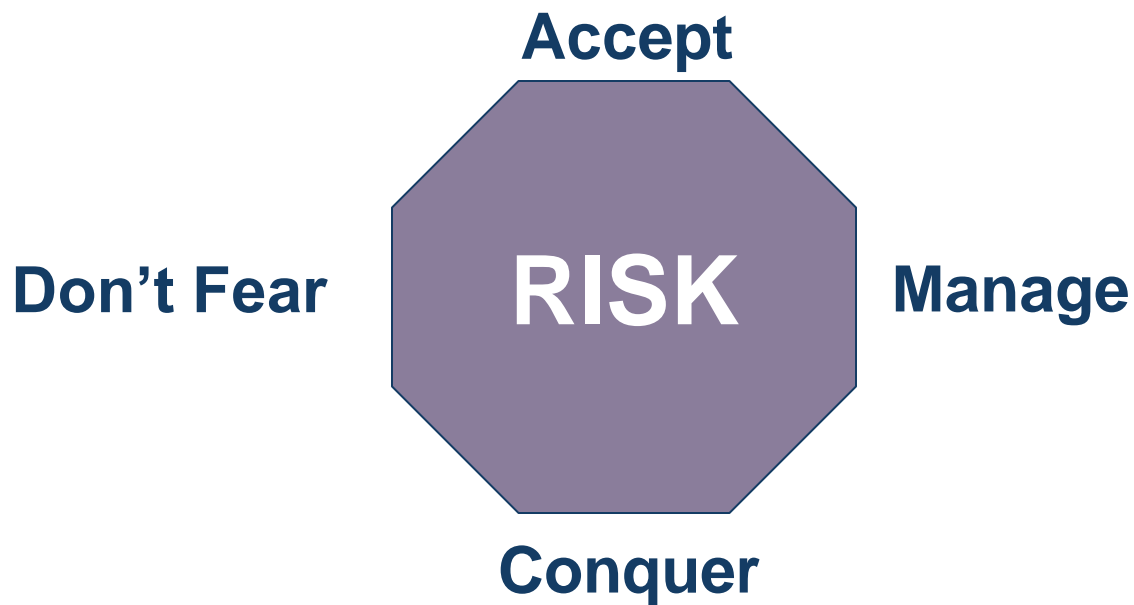


Milk Volatility

January 2007 – April 2013



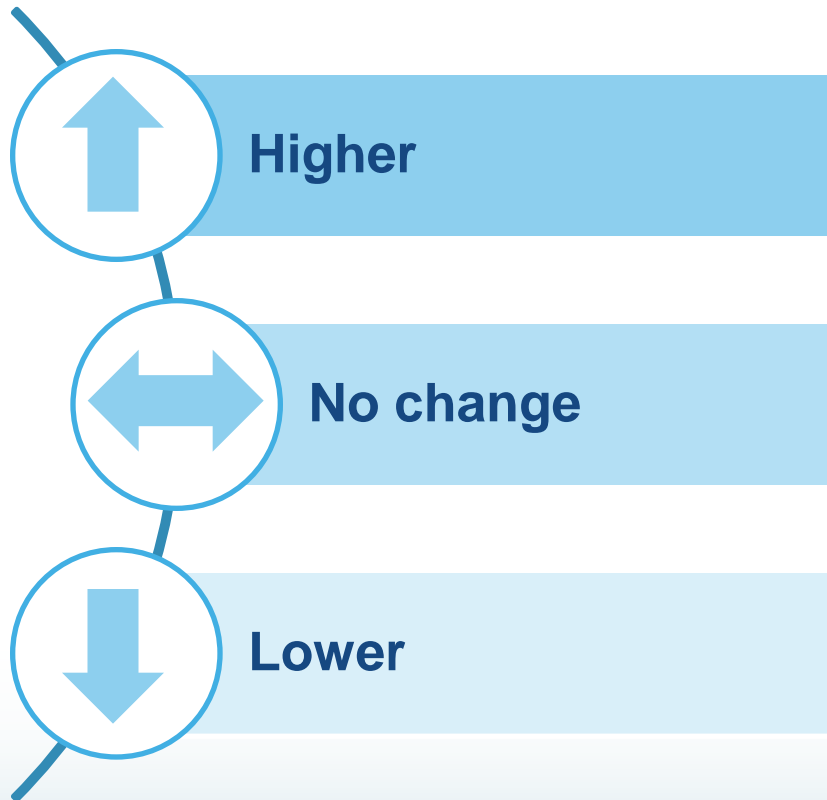
Market Risk Summary



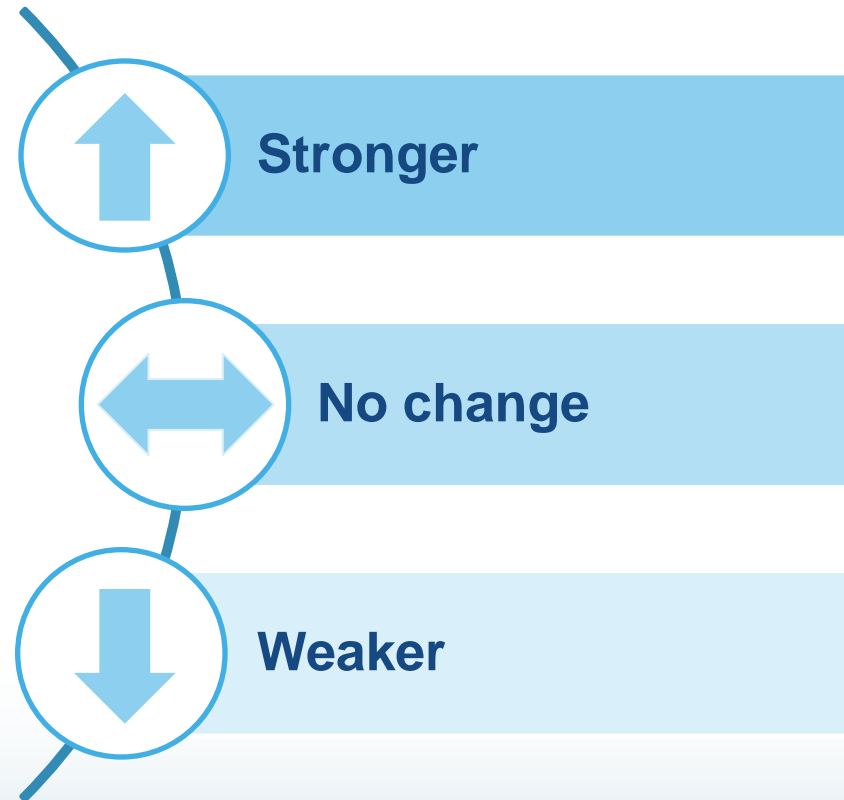
If you don't manage risk, you are assuming risk
If you are assuming risk, you are **speculating!**

Types of Market Risk

Dairy Futures Prices



Cash Dairy Basis



Impact of Risk

Greater the Volatility ... then

Greater the Risk ... then

Greater the Need to Manage Risk ... then

IT'S ALL ABOUT RISK!

Summary of Risk Management

Simply stated:

- It is all about your “**BOTTOM LINE**”

Protecting and/or Improving your
“**CASH MARKET POSITIONS**”

Futures Contract

Legally binding agreement to accept
delivery of or make delivery of a
standardized quantity and quality
of a commodity to a standardized place
in a standardized time period for a price
discovered in an organized futures exchange.

CLASS III Milk Futures

Contract Specifications

Size: 200,000 lbs. of Class III Milk (~90 metric tons)

Pricing unit: U.S. cents per hundredweight (cwt.)

Tick size: US\$0.01 per cwt. (=US\$20.00 per contract)

Ticker symbol: Open auction (DA) and Globex Electronic (DA)

Daily price limit: US\$0.75 per cwt. above or below the previous day's settlement

Contract months: Twenty-four consecutive months

Position Limits: 1,500 contracts in any contract month

Trading hours: **(Chicago time)**

Electronic: Sundays at 5:00 p.m. through Friday at 1:55 p.m. with daily trading halts from 4:00 p.m. to 5:00 p.m.

Open-auction: 9:05 a.m. – 1:10 p.m. Monday thru Friday



Cash Settled Cheese Futures

Contract Specifications

Size: 20,000 lbs. (~9 metric tons)

Pricing unit: U.S. Cents per pound

Tick size: US\$0.001 per pound (\$20.00 per contract)

Ticker symbol: Globex Electronic (CSC)

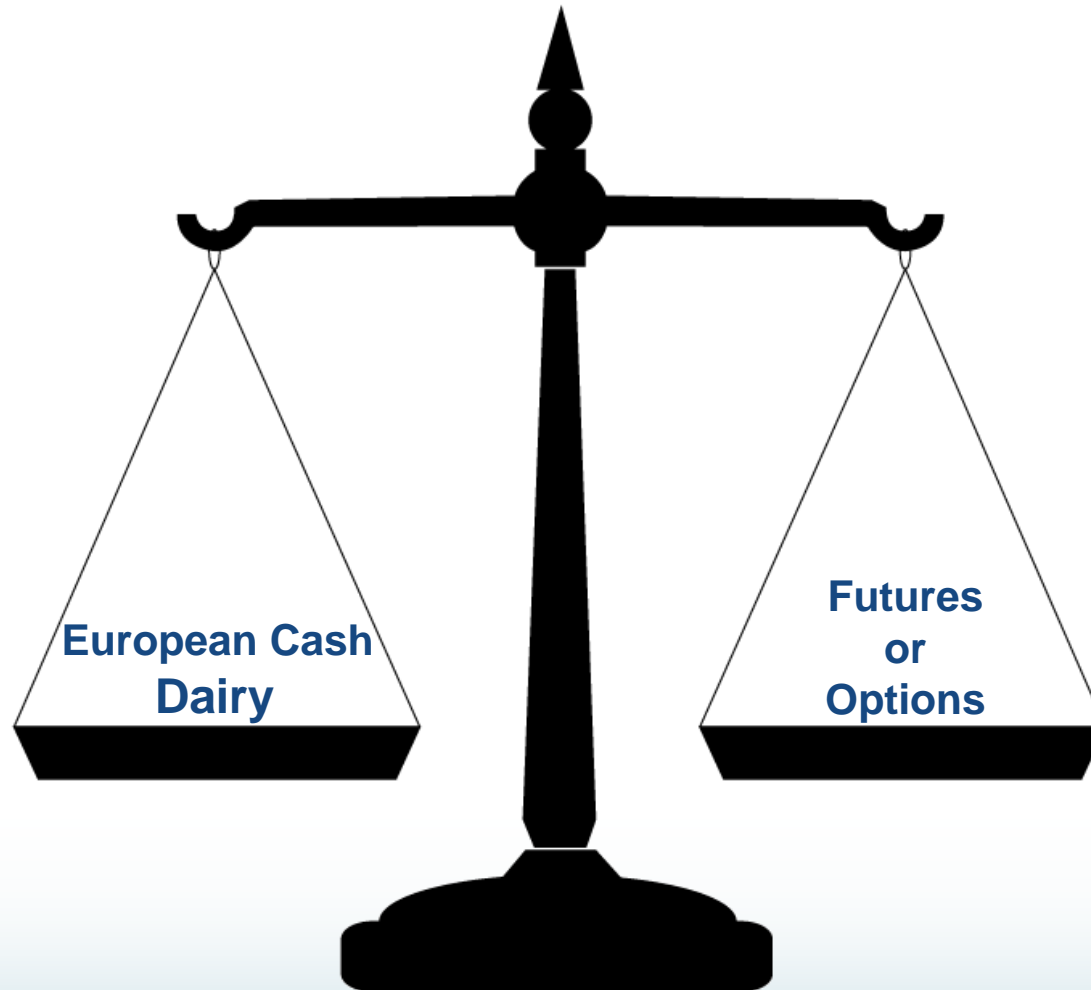
Daily price limit: US\$0.75 per pound – Expandable for nearest contract, No limits in spot month

Contract months: Twenty-four consecutive months

Trading hours: **(Chicago time)**

Electronic: Sundays at 5:00 p.m. through Friday at 1:55 p.m. with daily trading halts from 4:00 p.m. to 5:00 p.m.

Price Risk Management



Hedging Mechanics

FACT:

Most Cash Markets & Futures Markets move up and down together

HEDGING POSITIONS:

Opposite positions in Cash Market and Futures Market

HEDGING RESULTS:

Loss in one market is offset by a gain in the other market

Regardless of price direction, the result is the same!

Short Milk Hedge Example # 1

(Falling Market)

	CASH	FUTURES	BASIS
May24	Cash Forward @ \$19.30/cwt. <small>(information only)</small>	Short Nov @ \$17.80/cwt.	Expected Basis + 1.50
Oct15	Sell Milk @ \$17.30/cwt.	Buy Nov @ \$15.80/cwt.	Actual Basis + 1.50
		\$2.00/cwt. Gain	No change

Sell Cash Milk	\$17.30/cwt.
Futures gain	+ 2.00/cwt.
Net Sale Price	\$19.30/cwt.

Short Milk Hedge Example # 2

(Rising Market)

	CASH	FUTURES	BASIS
May24	Cash Forward @ \$19.30/cwt. <small>(information only)</small>	Short Nov @ \$17.80/cwt.	Expected Basis + 1.50
Oct15	Sell Milk @ \$19.55/cwt.	Buy Nov @ \$18.05/cwt.	Actual Basis + 1.50
		\$0.25/cwt. Loss	No change

Sell Cash Milk	\$19.55/cwt.
Futures loss	- 0.25/cwt.
Net Sale Price	\$19.30/cwt.

What Do You See?

Risk

or

Opportunity



CHOOSE OPPORTUNITY

Agricultural
Futures and Options



Option Defined

**Contract between two parties
that conveys a *RIGHT*
but not an obligation
to buy or sell
a specific commodity
at a specific price
within a specific time period
for a premium.**

Types of Options

CALLS

- Contains the **right to BUY**

Used to establish maximum cost of your dairy input. Used by cheese manufacturer to establish maximum milk cost

PUTS

- Contains the **right to SELL**

Used to establish a price floor for your output. Used by a dairy farm operator to establish minimum milk price



CHOOSE

VARIETY

Agricultural
Futures and Options



Buying Strategies

Long Futures – locks in a purchase price

Long Call – locks in a maximum purchase price

Long Call & Short Put – locks in a range

Structured Maximum Price Cash Contracts

1. Long-term Purchase Agreement with Long Put Option

2. Basis Contract with Long Call Option

Selling Strategies

Short Futures – locks in a price level

Long Put – locks in a minimum price level

Long Put & Short Call – locks in a price range

Structured Minimum Price Cash Contracts

1. Cash Forward Contract with Long Call Option
2. Basis Contract with Long Put Option



CHOOSE LIQUIDITY

Agricultural
Futures and Options



Volume & Open Interest

Key CME Dairy Contracts

Commodity Contract	Average Daily Volume	Open Interest
Class III Milk Futures	1,147	27,766
Class III Milk Options	1,246	68,466
Butter Futures/Options	130	7,465
Cheese Futures/Options	251	13,405



CHOOSE

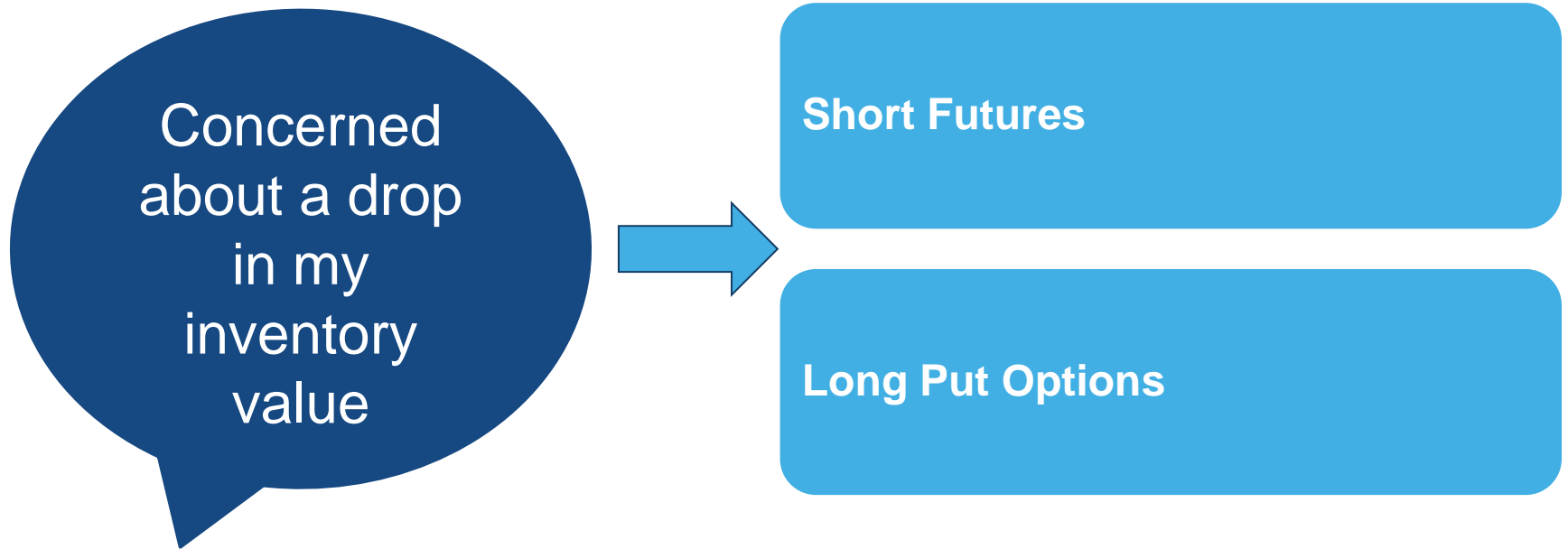
EFFICIENCY

Agricultural
Futures and Options



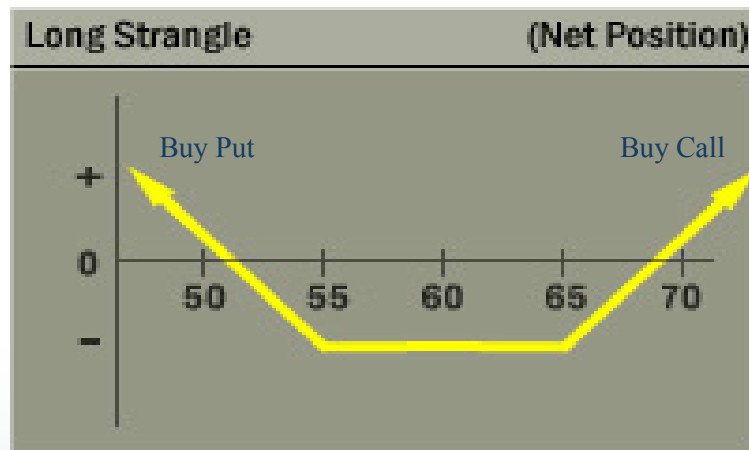
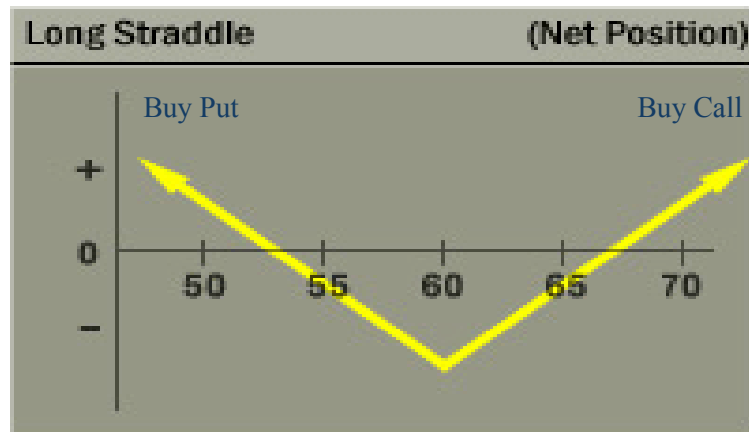
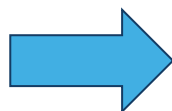
Concerns & Potential Solutions

Concerns & Potential Solutions



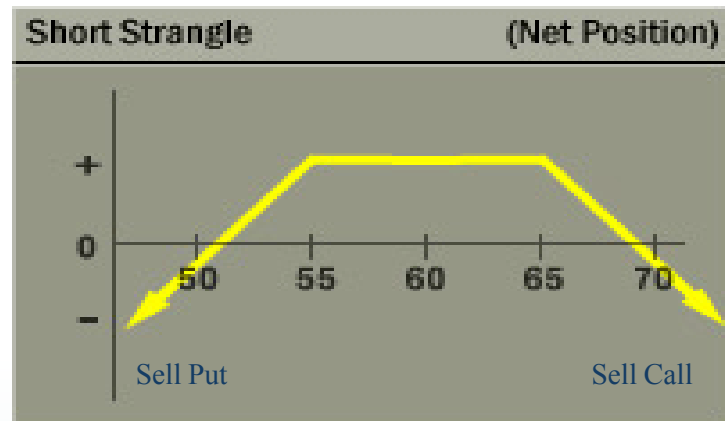
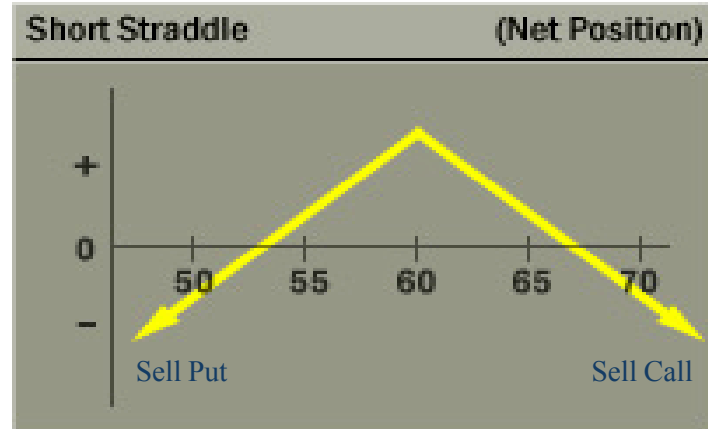
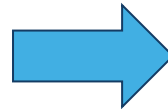
Concerns & Potential Solutions

I think volatility is picking up but not sure of direction

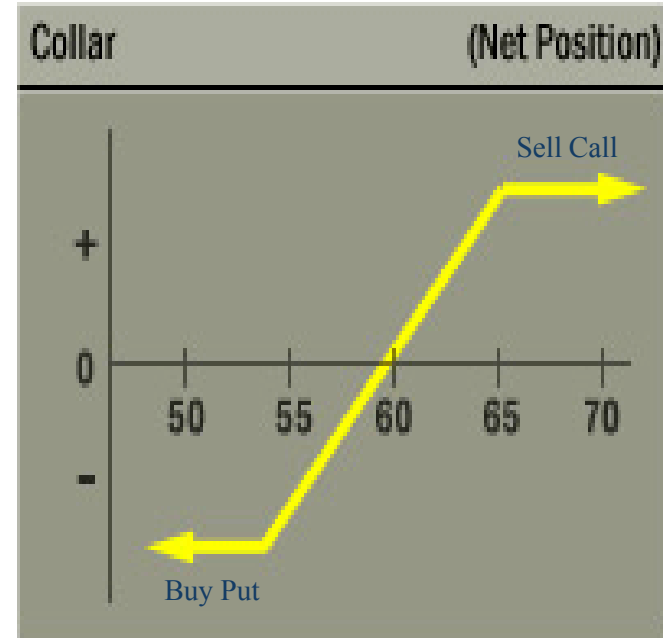
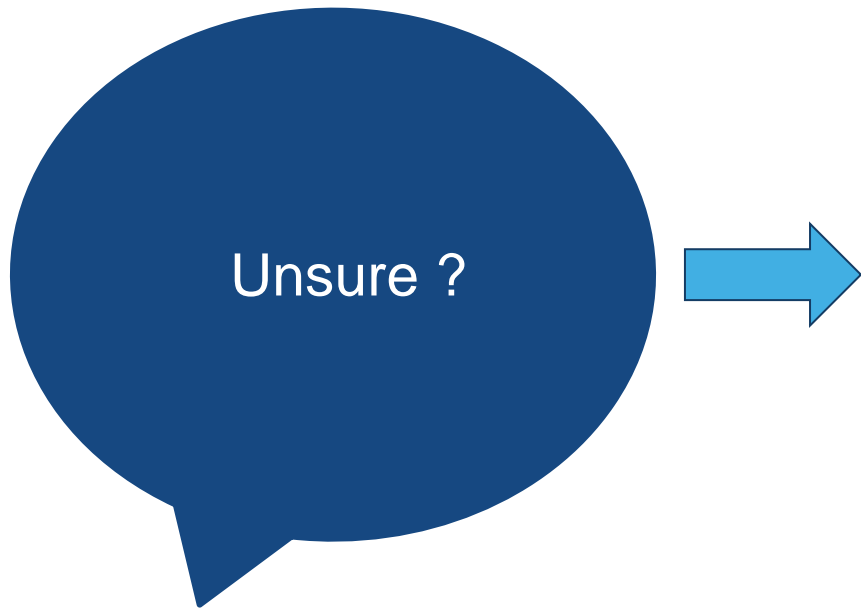


Concerns & Potential Solutions

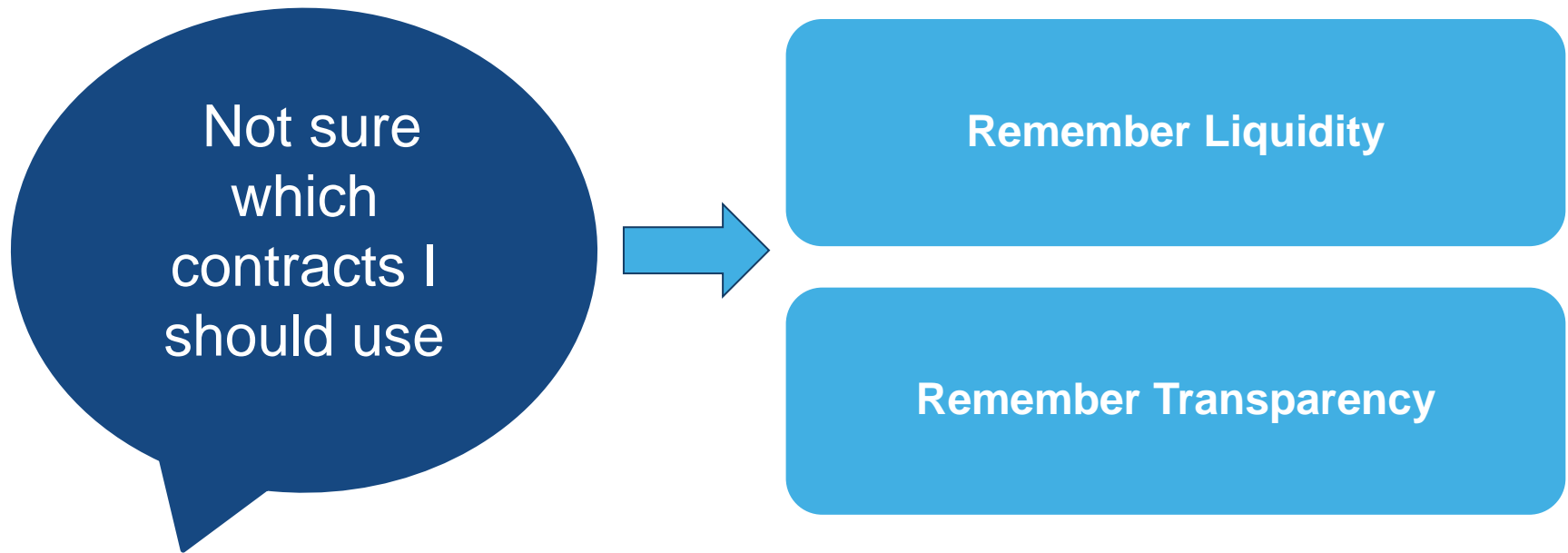
I want to improve our market share in a stable market



Concerns & Potential Solutions



Concerns & Potential Solutions



Summary & Benefits of Futures & Options

Benefits of CME Group Futures and Options

Variety of Products

Flexible Uses

Liquidity & Transparency

Regulation & Financial Integrity

Choice of Trading Platforms

Customer Care

Questions?

Appendix – Contract Specifications

Cash Settled Butter Futures

Contract Specifications

Size: 20,000 lbs. of Butter (~9 metric tons)

Pricing unit: U.S. cents per pound

Tick size: US\$0.00025 per pound (=US\$5.00 per contract)

Ticker symbol: Globex Electronic (CB)

Daily price limit: US\$0.05 per pound – Expandable to \$0.20

Contract months: Twenty-four consecutive months

Quality: Grade AA

Position Limits: Non-spot :500 contracts in any contract month, Spot 100 contracts.

Trading hours: **(Chicago time)**

Electronic: Sundays at 5:00 p.m. through Friday at 1:55 p.m. with daily trading halts from 4:00 p.m. to 5:00 p.m.



Cash Settled Butter Options

Contract Specifications

Underlying

- 20,000 lbs. Cash Settled futures contract
- Standard option: Twenty-four consecutive months

Tick Size

- US\$0.00025 per pound (US\$5.00 per contract)

Strike Price Interval

- 2 cents

Customer Care

For More Information on CME Group Commodity Products

Director
Commodity Research &
Product Development
Chicago Based

+1 312-930-4536
Charles.Piszczor@cmegroup.com

Charles
Piszczor



Director
Commodity Products
Chicago Based

+1 312-930-4595
Thomas.Clark@cmegroup.com

Thomas
Clark



Executive Director
Commodity Products
London Based

+44 20 3379 3729
Jeffry.Kuijpers@cmegroup.com

Jeffry
Kuijpers



Futures trading is not suitable for all investors, and involves the risk of loss. Futures are a leveraged investment, and because only a percentage of a contract's value is required to trade, it is possible to lose more than the amount of money deposited for a futures position. Therefore, traders should only use funds that they can afford to lose without affecting their lifestyles. And only a portion of those funds should be devoted to any one trade because they cannot expect to profit on every trade.

The Globe Logo, CME®, Chicago Mercantile Exchange®, and Globex® are trademarks of Chicago Mercantile Exchange Inc. CBOT® and the Chicago Board of Trade® are trademarks of the Board of Trade of the City of Chicago. NYMEX, New York Mercantile Exchange, and ClearPort are trademarks of New York Mercantile Exchange, Inc. COMEX is a trademark of Commodity Exchange, Inc. CME Group is a trademark of CME Group Inc. All other trademarks are the property of their respective owners.

The information within this presentation has been compiled by CME Group for general purposes only. CME Group assumes no responsibility for any errors or omissions. Although every attempt has been made to ensure the accuracy of the information within this presentation, CME Group assumes no responsibility for any errors or omissions. Additionally, all examples in this presentation are hypothetical situations, used for explanation purposes only, and should not be considered investment advice or the results of actual market experience.

All matters pertaining to rules and specifications herein are made subject to and are superseded by official CME, CBOT, NYMEX and CME Group rules. Current rules should be consulted in all cases concerning contract specifications.