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The document has been prepared to introduce some of the key terms and concepts associated with futures and futures options trading. Investors are reminded that the risk of loss from trading futures or futures options can be substantial and these products may not be for everyone. Investors also need to consider the level of risk they are willing to accept and the suitability of any investment before acquiring a position. The following information is not to be construed as an offer to sell or a solicitation or an offer to buy any futures or futures options. It is simply provided to you as is, for general use and information purposes only by Union Securities Ltd. Please contact your USL broker for further assistance.

Introduction to Exchange Traded Futures

INTRODUCTION

People have been trading goods and services since the beginning of time and evidence of organized markets can be traced back many thousands of years. In fact, evidence of organized markets in the Middle East and Asia have been discovered dating back as early as 1,000 years BC. These early markets have evolved into those of modern times where participants expect an efficient market to provide:

- A place to exchange goods or services
- Price discovery
- Facilities to transfer capital
- Ability to transfer risk
- Market information

During the early years of North American agriculture it was not uncommon for imbalances in supply and demand to cause violent price swings in local cash markets. These volatile conditions were often the result of inadequate storage facilities or a lack of standardized marketing agreements. Fluctuating production and consumption levels led to the introduction of forward contracts known as the “to-arrive” contract. These contracts originated in Britain in the 1700’s and usually consisted of a negotiated agreement between counterparties with the terms of sale concluded at the time of delivery. In 1851 the first to-arrive contract in North America was recorded at the Chicago Board of Trade (CBOT), which at the time was predominantly a cash grain market. Unfortunately the early to-arrive contracts were not a perfect solution to grain marketing as disputes often occurred due to limited pricing information and from their lack of transferability. These inadequacies led to the development of the first North American futures contract, which standardized the quality, quantity, time and place of delivery of a commodity. In 1865 the first futures contract was introduced at the CBOT, which provided participants with the ability to “offset” their purchases or sales without taking delivery. Although the Japanese are generally regarded as the originators of futures markets with the trading of rice contracts in the early 1600’s, these early CBOT contracts were developed to assist farmers, elevator companies and grain merchandisers by resolving the problems of the early forward agreements or to-arrive contracts.

In Canada the Winnipeg Grain and Produce Exchange began trading forward agreements in 1887 and in 1904 Wheat, Oats and Flaxseed futures were introduced with a Thunder Bay delivery point. Later in 1913, Barley futures were listed and Canola futures were added in 1963. More recently futures options were introduced on selected contracts at both the CBOT and the WCE and it is anticipated these products will continue to play an important role in providing risk management and price discovery in the agricultural sector.

CASH MARKET

A cash market involves the negotiation or trading of a physical commodity where buyers and sellers agree to the specific terms of a contract. Cash markets often consist of localized markets where local supply and demand factors dictate the contract terms. Contract terms can take many forms and prices are usually quoted based upon a relevant futures contract month.

FUTURES MARKET

A futures market involves the trading of standardized contractual agreements known as futures contracts, which are bought and sold under the terms of a recognized commodity exchange. These contracts may trade in an open, auction type environment with bids and offers made by public outcry or they may trade over an electronic platform.

FUTURES CONTRACTS

By definition a futures contract is an obligation to make (the seller) or take (the buyer) delivery of a set quantity and quality of a commodity at a specific future date; and with delivery terms under set rules and regulations of the commodity exchange.

Trade participants often consider a variety of influential factors when developing an opinion of values for future delivery. When a trade occurs between buyers and sellers on the trading floor of a commodity exchange we refer to the process as price discovery because it reflects the various forces of supply and demand that are at work. This price discovery process in the futures market serves to provide a foundation for pricing in a related cash market. For a futures contract to work efficiently, it should fulfill the following three requirements:

1. STANDARDIZED:

- * Commodity Type
- * Delivery Point
- * Fixed Quantity
- * Delivery Month
- * Quality (Discount/Premium)

2. VISIBLE:

- * Prices established by open outcry or electronic platform

3. ACCESSIBLE:

* Price availability to all users via electronic services, newspapers, radio, etc.

COMMODITY EXCHANGES AND THEIR CLEARING CORPORATIONS

A futures exchange provides the facilities for participants to trade futures or futures option contracts by open outcry or over an electronic platform. North American Exchanges are either structured as membership associations or as for-profit corporations. All futures exchanges are required to monitor and enforce the rules and regulations of the exchange, develop new or revise existing contracts and designate a Clearinghouse to act as guarantor of the financial obligations to every contract that is cleared.

As mentioned in the introduction, a unique feature of a futures contract is its ability to be “offset.” This provides the opportunity for an original party to transfer their market risk to another participant by exiting their position. Offset involves selling a contract that was originally purchased or buying back a contract that was originally sold. Since a market participant’s only obligation is to the clearinghouse of a commodity exchange the process of offset is easily achieved. The clearinghouse is also responsible for all related clearing functions, daily settlement of margin monies, guaranteeing financial settlement, facilitating deliveries and handling exercise and assignment of futures options.

PARTICIPANTS OF A FUTURES MARKET

The ability to “offset” a futures contract is one of the main features that attracts participants to a futures market thereby helping to create a liquid and efficient market environment. Liquidity is essential for the success of any futures market. Continuous participation and competition of buyers and sellers allow for positions to be established or offset without any significant price impact. Therefore, participation from both of the following groups is required for a futures contract to function efficiently.

Market participants can generally be divided into two groups:

1. SPECULATORS:

Speculators are participants with risk capital who take a position in the market based on an educated guess or by utilizing a trading system. Unlike other types of investments such as stocks and bonds, an investor who trades futures doesn’t acquire anything tangible but is simply assuming an obligation to make or take delivery at some point in the future. If an investor believes a futures contract will rise, they will buy or “go long” a futures contract and hope to profit from a price increase by offsetting the position at a later date. Conversely if they thought prices are were going lower they would sell or “go short” at today’s price and hope to buy back or offset the position at a lower price. Futures options are a derivative of a specific underlying futures contract that can provide a lower risk alternative to trading,

Many individuals think futures trading is synonymous with gambling. Futures participants rarely agree with this statement, as gambling is usually a recreational activity based on chance.

Furthermore, in futures trading there is no “edge” based on probabilities, as it is a zero-sum game that requires extensive research, knowledge of market trends and a disciplined approach to be successful.

Please see our downloadable [Guide for Speculators](#), a PDF file located on our website.

2. HEDGERS:

Hedgers are trading participants with an objective of minimizing price risk in an underlying commodity. Hedging is generally defined as acquiring an equal but opposite position in a futures market to one that is owned or controlled in a cash market. In actuality, the term hedging often refers to other strategies as well, but always with the objective of minimizing risk in a related market. Hedgers include a broad spectrum of participants that can include individuals from a variety of market sectors.

Please see our downloadable [Guide for Hedgers](#), a PDF file located on our website.

HEDGING FOR PRICE PROTECTION

As previously indicated, hedging involves the establishment of an equal but opposite position in a relevant futures market to that of a current or anticipated cash position. This action results in the transformation of price risk into basis risk.

In the Cash (Physical) Market:

A participant in this market is termed to have a “long” position if they own or anticipate owning a specific commodity. Conversely they are termed to have a “short” position if inventory requirements have yet to be purchased.

In the Futures Market:

When referring to a futures market a participant who has acquired a “buy” position is termed to be “long futures” and has a commitment to ownership upon delivery by the seller. Conversely, a participant who has acquired a “sell” position is termed to be “short futures” and has a commitment to deliver (sell) at a set date in the future.

In actuality, the majority of futures contracts are not settled through a delivery process. In fact it is commonly accepted that less than 5% of all futures contracts undergo delivery. Futures Commission Merchants (brokerage houses) are required by their regulators to enforce strict guidelines for delivery of exchange traded futures contracts. These rules encourage speculators and other participants to exit their positions through the “offset” process usually prior to the delivery date.

THEORY OF FUTURES TRADING

An efficient market requires a relationship to exist between futures and cash markets. This relationship affords marketers an opportunity to manage price risk through hedging since cash

and futures markets tend to fluctuate by similar amounts. However, prices of cash commodities and futures are rarely the same and this difference is referred to as “Basis”.

“Basis” represents the difference between a local cash (or spot) price at a specific location and a relevant futures price. Basis is determined by subtracting a cash price from the relevant futures contract and if the result is negative, the basis is quoted as being under the futures. Conversely, a positive basis is quoted as being over the futures.

$$\text{Basis} = \text{Cash Price} - \text{Futures Price}$$

Basis is sometimes referred to as “localizing a commodity”. Some of the many factors that may affect basis include:

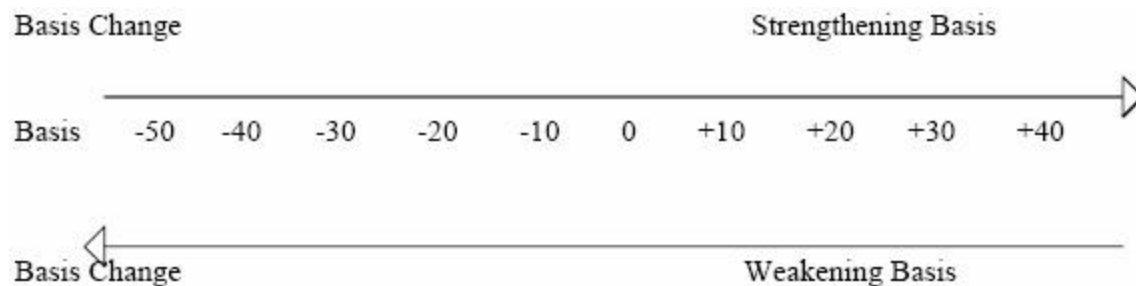
- Supply and Demand for the commodity
- Supply and Demand for competing products
- Freight, storage and interest rates
- Method of Delivery (i.e. elevator tariffs, producer cars, storage costs)
- Market Risk

A change in basis value is commonly referred to as a narrowing or widening of the basis. It is important to recognize that a basis quoted as being under a relevant futures month, will benefit a long cash position from a basis narrowing. Conversely, a short cash position will benefit from a basis that is widening.

If a basis is quoted over the futures, a long cash position will benefit from a widening basis and a short cash position will benefit from a narrowing basis.

Two other terms synonymous with the change in the value of basis are, weakening and strengthening. These terms are often considered to be more useful as they can be applied in the same manner whether a basis is positive (over the futures) or negative (under the futures).

STRENGTHENING OR WEAKENING BASIS



There are also a couple of other terms that merchandisers frequently associate with basis. Spot basis generally refers to the difference between the current cash price and the relevant nearby futures price. A deferred basis refers to the difference between a forward delivery position and a relevant deferred futures month.

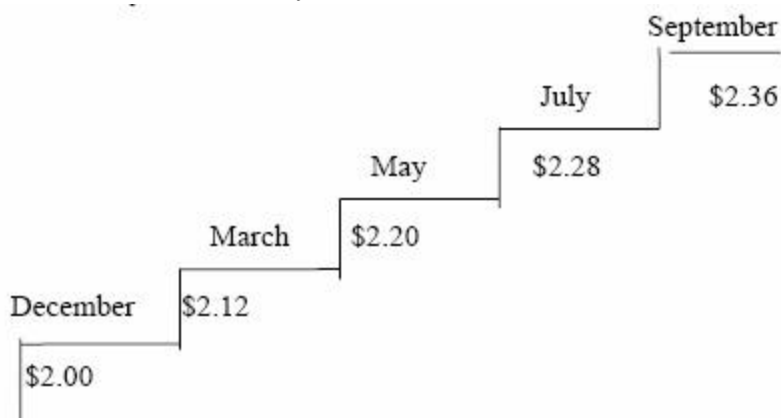
CARRYING CHARGE MARKETS

In a carrying charge or normal market (also may be referred to as a contango market), futures prices for each delivery period are often exemplified by the cost of storing a commodity from present to each forward delivery position.

To carry a commodity from one delivery period to the next the following costs may be incurred:

- Interest on invested capital
- Storage costs
- Insurance

In a carry charge market buyers pay a higher price for a commodity delivered in the future to avoid some of these nearby costs.



In the above example, if the total cost of storing corn is 4 cents per bushel each month, and futures prices reflect a full carry charge, the price for the different delivery months might look something like the above.

Deferred delivery months that reflect all associated costs of carrying a commodity from one delivery period to the next are said to be trading at “full carry”. If the value of a deferred futures month is greater than the nearby but less than the full carry value it is still considered to be in a carry charge market but just not trading at full carry. In theory, a futures market with abundant supply should trade at the relevant cash or spot price plus the associated costs of financing and storing the product. Conversely, if a market is less than adequately supplied, it is unlikely it will trade at full carry as the focus of buyers will be directed towards the nearby contract to ensure supply.

In actuality markets with abundant supply rarely trade at full carry ahead of their delivery month. In fact, it is uncommon for liquid markets to trade at more than 80% of their full carry value. Spread traders often view an efficient market that trades towards full carry to be a risk-less trade therefore spread buying (buying the nearby contract and selling a deferred contract) may prevent markets from trading at full carry ahead of the delivery month. However, once a contract enters a delivery period speculative activity is reduced and the nearby contract may trade closer to its full carry value.

INVERTED MARKET

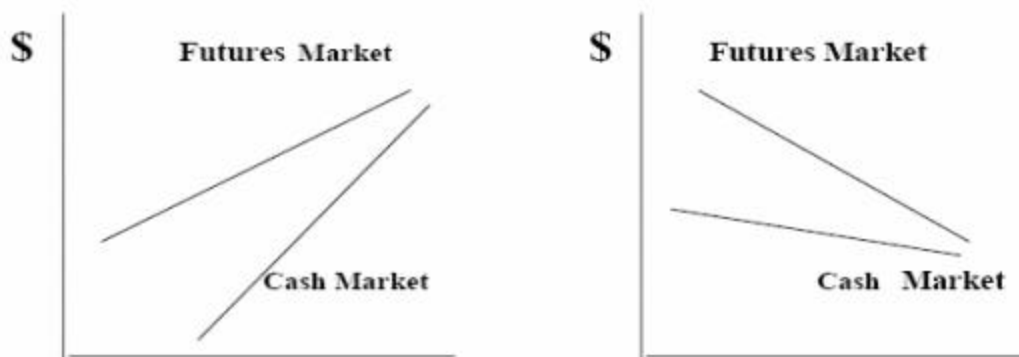
A market where demand exceeds supply causing cash prices to strengthen in relation to futures prices and nearby futures to trade at a premium over deferred months is commonly referred to as an inverted market or a market in “backwardation”. These conditions are common with commodity markets where seasonal influences of a commodity can generate supply/demand imbalances.

An inverted market may develop due to:

- Increased near term demand
- Insufficient near term supply
- Seasonal influences (old crop vs. new crop)

CONVERGENCE

Cash and futures prices generally move in the same direction but not necessarily by the same amount. Prices in both markets should converge toward the end of a delivery term regardless of rising or declining markets, a term commonly referred to as convergence. If price discrepancies between cash and futures markets occur, traders will look to arbitrage the market in order to capitalize on a perceived price discrepancy. Arbitrage involves the simultaneous buying and selling of a commodity in two different markets (i.e. participation in both cash and futures markets) to profit from a perceived price discrepancy. It is this action that makes a market efficient, as both have to be visible and liquid. Moreover, it is important to recognize that arbitrage establishes a “threat of delivery” which ensures convergence of cash and futures prices over time and enhances the integrity of a marketplace.



MARGIN

By definition margin is a good faith deposit made by both buyers and sellers of a futures contract to ensure fulfillment of each counterparty's obligations. In futures trading this deposit is deemed a “performance bond” which is unlike equities trading where it is considered a loan and a down payment against an underlying interest.

All futures positions require initial margin before a transaction can occur. The minimum margin requirement is established by the commodity exchange and usually represents a nominal amount in comparison to the full value of an underlying contract. It is important to emphasize that margin

only represents a small portion of a contracts total contract value. Furthermore, futures positions are brought to the market daily, which is commonly termed as being “marked to market”.

Participants need to fully understand the leveraging effect that is created through the margining process and that without a disciplined approach to trading, the increased level of risk it entails.

The following describes the two types of margin a futures participant may be subject to:

1. INITIAL MARGIN

Funds required by both buyers and sellers in order to initiate a futures position. These must be deposited in the account before a position is taken.

2. MAINTENANCE MARGIN

An adverse price movement against an established position will reduce the marginable value of an account. Generally a market move of approximately 25% of the initial requirements known as the maintenance level will trigger a margin call, which must be met immediately to restore a position to original margin status. As mentioned previously all positions are marked to market daily.

This completes the first document of a series in Futures and Futures Options Trading – please see related articles located in our website at www.union-securities.com/futures.