

NATIONAL FUTURES ASSOCIATION

A Guide to

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Understanding  
Opportunities  
and Risks in  
Futures Trading

## Table of Contents

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|    |   |
|----|---|
| 4  | <i>Introduction</i>   |
| 7  | <i>Early Futures Markets &amp; Today's Futures Markets: What, Why &amp; Who</i> |
| 8  | <i>The Market Participants</i>  |
| 11 | <i>What is a Futures Contract?</i>  |
| 12 | <i>The Process of Price Discovery</i>   |
| 13 | <i>Gains and Losses on Futures Contracts</i>                                    |
| 13 | <i>The Arithmetic of Futures Trading and Leverage</i>                           |
| 15 | <i>Margins</i>  |
| 17 | <i>Basic Trading Strategies</i>   |
| 22 | <i>Participating in Futures Trading</i>   |
| 34 | <i>What to Look for in a Futures Contract</i>                                   |
| 37 | <i>Understanding (and Managing) the Risks of Futures Trading</i>                |
| 40 | <i>Options on Futures Contracts</i>   |
| 45 | <i>In Closing</i>   |
| 46 | <i>Glossary of Terms</i>  |
| 49 | <i>NFA Information and Resources</i>  |

## Understanding Opportunities and Risks in Futures Trading

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*National Futures Association is a Congressionally authorized self-regulatory organization of the United States futures industry. It's mission is to provide innovative regulatory programs and services that ensure futures industry integrity, protect market participants and help NFA Members meet their regulatory responsibilities.*

*This booklet has been prepared as a part of NFA's continuing public education efforts to provide information about the futures industry to potential investors.*

## Introduction

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Futures markets have been described as continuous auction markets and as clearing houses for the latest information about supply and demand. They are worldwide meeting places of buyers and sellers of an ever-expanding list of products that includes financial instruments such as U.S. Treasury bonds, stock indexes, and foreign currencies as well as traditional agricultural commodities, metals, and petroleum products. There is also active trading in options on futures contracts allowing option buyers to participate in futures markets with known risk.

Electronic information and communication technologies are providing new and better trading tools and new and more diverse trading opportunities. In some cases, entirely electronic markets function alongside open-outcry markets that have existed for more than a century and a half. Electronic order placement is increasingly commonplace. As such developments help make futures markets more useful to more people, it follows that they have become more widely and extensively used.

Notwithstanding the changes that have and are continuing to occur, the primary purpose of futures markets remains unchanged: To provide an efficient and effective mechanism for the management of price risks. By buying or selling futures contracts that establish a price now for a purchase or sale that will take place at a later time, individuals and businesses are able to achieve what amounts to insurance protection against adverse price changes. It is called hedging.

Simultaneously, other futures market participants are speculators. By buying or selling, depending on which direction they expect prices to move, they hope to profit from the very price changes that hedgers seek to avoid. The interaction of hedgers and speculators,

each pursuing their own goals, helps to provide active, liquid, and competitive markets.

Speculative participation in futures trading has become increasingly attractive with the availability of alternative methods of participation. Whereas many futures traders continue to prefer to make their own trading decisions—what to buy and sell and when to buy and sell—others use the services of a professional trading advisor or avoid day-to-day trading responsibilities by establishing a fully managed trading account or by participating in a commodity pool that is similar in concept to a mutual fund.

For those individuals who fully understand and can afford the risks that are involved, the allocation of some portion of their investment capital—the portion that is truly risk capital—to futures speculation can provide a means of achieving greater portfolio diversification and a potentially higher overall rate of return on their investments. There are also a number of ways futures and options on futures can be used in combination with other investments to pursue larger profits or to limit risks.

Speculation in futures contracts, however, is clearly not appropriate for everyone. Just as it is possible to realize substantial profits in a short period of time, it is also possible to incur substantial losses in a short period of time. The possibility of large profits or losses in relation to the initial commitment of capital—including losses potentially larger than the initial commitment of capital—stems principally from the fact that futures trading is a highly leveraged form of speculation. Only a relatively small amount of money is required to participate in the price movements of assets having a much greater value. As we will illustrate, the leverage of futures trading can work for you when prices move the direction you anticipate or against you when prices move in the opposite direction.

The purpose of this booklet is not to suggest either that you should or shouldn't participate in futures trading. That is a decision you should make only after consultation with your broker or financial advisor and in light of your own financial situation and objectives.

Rather, the pages that follow are intended to help provide the kinds of information you should always obtain first—and questions you should ask—about any investment you are considering. Including:

- Information about the investment itself and the risks involved.
- How readily your investment or position can be liquidated when such action is necessary or desired.
- Who the other market participants are.
- Alternative methods of investing.
- How prices are arrived at.
- The costs of trading, including commission charges.
- How gains and losses are realized.
- What forms of regulation and investor protection exist.
- The experience, integrity and track record of your broker or advisor.
- The financial condition of the firm with which you are trading.

In sum, obtain the kinds of information you need to be an informed investor.

## Early Futures Markets & Today's Futures Markets: What, Why & Who

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The frantic shouting and signaling of bids and offers on the trading floor of an open-outcry futures exchange undeniably convey an impression of chaos. The reality, however, is that chaos is what futures markets replaced. Prior to the establishment of central grain markets in the mid-nineteenth century, the nation's farmers carted their newly harvested crops over plank or dirt roads to major population and transportation centers each fall in search of buyers. This seasonal supply glut drove prices downward to giveaway levels and even to throwaway levels as corn, wheat and other crops often rotted in the streets or were dumped in rivers and lakes for lack of storage. Come spring, shortages frequently developed and foods made from corn and wheat became barely affordable luxuries.

Throughout the year, it was each buyer and seller for himself, with neither a place nor a mechanism for organized, competitive bidding. The first central markets were formed to meet that need. Eventually, contracts were entered into for forward as well as for spot (immediate) delivery. So-called forwards were the forerunners of present day futures contracts.

Spurred by the need to manage the price and interest rate risks that exist in every type of modern business, today's futures markets have also become major financial centers, without the existence of which even the U.S. Treasury or Federal Reserve System would be hard-pressed to carry out their fiscal responsibilities. Current market participants are just as likely to be mortgage lenders, investment bankers and multinational corporations as farmers, grain merchants and exporters. Wherever there are hedgers who need to transfer price risks, there are speculators willing to selectively accept the risks in the pursuit of profit.

Futures prices, whether arrived at either through open outcry or by electronic matching of bids and offers, are immediately and continuously relayed around the world. A farmer in Nebraska, a merchant in Amsterdam, an importer in Tokyo and a speculator in Ohio have simultaneous and equal access to the latest market derived price quotations. Should they choose, they can establish a price level for future delivery—or for speculative purposes—simply by instructing their broker to buy or sell the appropriate contracts.

Images created by the fast-paced activity of a trading floor notwithstanding, regulated futures markets are more than ever a keystone of the world's most orderly, envied and intensely competitive marketing system.

## The Market Participants

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Should you decide to trade in futures contracts or options, either for speculation or price risk management, your orders to buy or sell will be communicated through your brokerage firm to the trading floor for execution by a floor broker. If you are a buyer, the broker will seek a seller at the lowest available price. If you are a seller, the broker will seek a buyer at the highest available price. That's what the shouting and signaling is about. Electronic systems are designed to achieve the same outcome.

Whatever the method of trading, the person who takes the other side of your trade may be or may represent someone who is a commercial hedger or perhaps someone who is a public speculator. Or, quite possibly the other party may be an independent trader who is trading for his own account. In becoming acquainted with futures markets, it is useful to have at least a general understanding of who these various market participants are, what they are doing and why.

### *Hedgers*

The details of hedging can be somewhat complex but the principle is simple. By buying or selling in the futures market now, individuals and firms are able to establish a known price level for something they intend to buy or sell later in the cash market. Buyers are thus able to protect themselves against—that is, hedge against—higher prices and sellers are able to hedge against lower prices. Hedgers can also use futures to lock in an acceptable margin between their purchase cost and their selling price. Consider this example.

A jewelry manufacturer will need to buy additional gold from its supplier in six months to produce jewelry that it is already offering in its catalog at a published price. An increase in the cost of gold could reduce or wipe out any profit margin. To minimize this risk, the manufacturer buys futures contracts for delivery of gold in six months at a price of \$300 an ounce.

If, six months later, the cash market price of gold has risen to \$320, the manufacturer will have to pay that amount to its supplier to acquire gold. But the \$20 an ounce price increase will be offset by a \$20 an ounce profit if the futures contract bought at a price of \$300 is sold for \$320.

The hedge, in affect, provided protection against an increase in the cost of gold. It locked in a cost of \$300, regardless of what happened to the cash market price. Had the price of gold declined, the hedger would have incurred a loss on the futures position but this would have been offset by the lower cost of acquiring gold in the cash market.

The number and variety of hedging possibilities is practically limitless. A corporate treasurer who will need to borrow money at some future date can hedge against the possibility of rising interest rates. An investor can use stock index futures to hedge against an overall increase in stock prices if he anticipates buying stocks at some future time or against declining stock prices if he or anticipates selling stocks. A cattle feeder can hedge against lower livestock prices and a meat packer against higher livestock prices. An exporter who has contracted to ship commodities on a future date at a fixed price can hedge to lock in the cost of acquiring the commodities for shipment, much as the jewelry manufacturer did.

Whatever the hedging strategy, the common denominator is that hedgers are willing to give up the opportunity to benefit from favorable price changes in order to achieve protection against unfavorable price changes.

### *Speculators*

Were you to speculate in futures contracts by buying to profit from a price increase or selling to profit from a price decrease, the party taking the opposite side of your trade on any given occasion could possibly be a hedger or it might be another speculator, someone whose opinion about the probable direction and timing of prices differs from your own.

The arithmetic of speculation in futures contracts, including the opportunities it offers and the equally important risks it involves, will be discussed in detail later on. For now, suffice it to say that speculators put their money at risk in the hope of profiting from an anticipated price change.

Buying futures contracts with the hope of later being able to sell them at a higher price is known as “going long.” Conversely, selling futures contracts with the hope of being able to buy back identical and offsetting futures con-

tracts at a lower price is known as “going short.” An attraction of futures trading is that it is equally as easy to profit from declining prices (by selling) as it is to profit from rising prices (by buying).

|             | Reasons for BUYING futures contracts                                   | Reasons for SELLING futures contracts                                     |
|-------------|--|---|
| Hedgers     | To lock in a price and thereby obtain protection against rising prices | To lock in a price and thereby obtain protection against declining prices |
| Speculators | To profit from rising prices   | To profit from declining prices   |

## What is a Futures Contract?

There are two types of futures contracts, those that provide for physical delivery of a particular commodity and those that call for an eventual cash settlement. The commodity itself is specifically defined, as is the month when delivery or settlement is to occur. A July futures contract, for example, provides for delivery or settlement in July.

It should be noted that even in the case of delivery-type futures contracts, very few actually result in delivery. Not many speculators want to take or make delivery of 5,000 bushels of grain or 40,000 pounds of pork. Rather, the vast majority of both speculators and hedgers choose to realize their gains or losses by buying or selling an offsetting futures contract prior to the delivery date.

Selling a contract that was previously purchased liquidates a futures position in exactly the same way that selling 100 shares of IBM stock liquidates an earlier purchase of 100 shares of IBM stock. Similarly, a futures contract that was initially sold can be liquidated by making an offsetting purchase. In either case, profit or loss is the difference between the buying price and the selling price, less transaction expenses.

Cash settlement futures contracts are precisely that, contracts that are settled in cash rather than by delivery at the time the contract expires. Stock index futures contracts, for example, are settled in cash on the basis of the index number at the close of the final day of trading. Delivery of the actual shares of stock that comprise the index would obviously be impractical.

## The Process of Price Discovery

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Futures prices increase or decrease largely because of the myriad factors that influence buyers' and sellers' expectations about what a particular commodity will be worth at a given time in the future (anywhere from less than a month to more than two years).

As new supply and demand developments occur and as more current information becomes available, these judgments are reassessed and the price of a particular futures contract may be bid upward or downward. This process of reassessment of price discovery is continuous.

On any given day the price of a July futures contract will reflect the consensus of buyers' and sellers' current opinions about what the value of the commodity will be when the contract expires in July. As new or more accurate information becomes available or as expectations change, the July futures price may increase or decrease.

Competitive price discovery is a major economic function—and, indeed, a major economic benefit—of futures trading. Through this competition all available information about the future value of a commodity is continuously translated into the language of price, providing a dynamic barometer of supply and demand. Price “transparency” assures that everyone has access to the same information at the same time.

## Gains and Losses on Futures Contracts

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Gains and losses on futures contracts are not only calculated on a daily basis, they are also credited or debited to each market participant's brokerage account on a daily basis. Thus, if a speculator were to have a \$500 profit as the result of a day's price changes, that amount would immediately be credited to his or her account and, unless required for other purposes, could be withdrawn. On the other hand, if the day's price changes resulted in a \$500 loss, the account would be debited for that amount.

The process just described is known as daily cash settlement and it's an important feature of futures trading. As will be seen when margin requirements are discussed later, it is also the reason a customer who incurs a loss on a futures position may be called on to immediately deposit additional funds.

## The Arithmetic of Futures Trading and Leverage

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To say that gains and losses in futures trading are the result of price changes is an accurate explanation but by no means a complete explanation. Perhaps more so than in any other form of speculation or investment, price changes in futures trading are highly leveraged. An understanding of this leverage—and how it can work to either your advantage or disadvantage—is absolutely essential to an understanding of futures trading.

As mentioned in the introduction, only a relatively small amount of money (known as margin) is required in order to buy or sell a futures contract. On a particular day, a margin deposit of only \$2,500 might enable you to purchase or sell a futures contract on \$100,000 worth of U.S. Treasury Bonds. Or for an initial margin deposit of about \$15,000 you might buy or sell a contract covering common

stocks currently worth \$300,000. Or for around \$4,000 you may be able to buy or sell a futures contract on 37,000 pounds of coffee currently worth \$40,000. The smaller the margin in relation to the underlying value of the futures contract, the greater the leverage.

If you speculate in futures contracts and the price moves in the direction you anticipated, high leverage can yield large profits in relation to your initial margin deposit. But if prices move in the opposite direction, high leverage can produce large losses in relation to your initial margin deposit. Leverage is a two-edged sword.

For example, assume that in anticipation of rising stock prices you buy one June S&P 500 stock index futures contract at a time when the June index is trading at 1200. Also assume your initial margin requirement is \$15,000. Since the value of the futures contract is \$250 times the index, each one point change in the index represents a \$250 gain or loss.

An increase of five percent in the index, from 1200 to 1260, would produce a \$15,000 profit (60 X \$250). Conversely, a 60 point decline would produce a \$15,000 loss. In either case, an increase or decrease of only five percent in the index would, in this example, result in a gain or loss equal to 100 percent of the \$15,000 initial margin deposit! That's the arithmetic of leverage.

Said another way, while buying (or selling) a futures contract provides the same dollars and cents profit potential as owning (or selling short) the actual commodity covered by the contract, low margin requirements sharply increase the percentage profit or loss potential.

Futures trading thus requires not only the necessary financial resources but also the necessary financial and emotional temperament. It can be one thing to have the value of your common stock portfolio decline by five percent but quite another, at least emotionally, to have that same five percent stock price decline wipe out 100 percent of your investment in futures contracts.

An absolute requisite for anyone considering trading in futures contracts—whether it's stock indexes or sugar, pork bellies or petroleum—is to clearly understand the concept of leverage. Calculate precisely the gain or loss that would result from any given change in the futures price of the contract you would be trading. If you can't afford the risk, or even if you're uncomfortable with the risk, the only sound advice is don't trade. Futures trading is not for everyone.

## Margins

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As is apparent from the preceding discussion, the arithmetic of leverage is the arithmetic of margins. An understanding of the different kinds of margins is essential to an understanding of futures trading.

If your previous investment experience has mainly involved common stocks, you know that the term margin—as used in connection with securities—has to do with the cash down payment and money borrowed from a broker to purchase stocks. *But used in connection with futures trading, margin has an altogether different meaning and serves an altogether different purpose.*

Rather than providing a down payment, the margin required to buy or sell a futures contract is a deposit of good faith money that can be drawn on by your brokerage firm to cover any day-to-day losses that you may incur in the

course of futures trading. It is much like money held in an escrow account. When you liquidate a futures position, your margin deposit is refunded to you, plus any undistributed profits or minus any uncollected losses on the trade.

Minimum margin requirements for a particular futures contract at a particular time are set by the exchange on which the contract is traded. They are typically five to 10 percent of the value of the futures contract. Exchanges continuously monitor market conditions and risks and, as necessary, raise or reduce their margin requirements. An increase in market volatility and the range of daily price movements is frequently a reason for raising margins.

Note that the exchanges' minimum margin requirements are exactly that: minimums that exchange-member brokerage firms must charge. Individual firms may have margin requirements higher than the exchange minimums.

There are two margin-related terms you should know: Initial margin and Maintenance margin.

Initial margin (sometimes called original margin) is the sum of money that you must deposit at the outset with the brokerage firm for each futures contract to be bought or sold. On any day that profits accrue to your open positions, the profits will be added to the balance in your margin account. On any day losses accrue, the losses will be deducted from the balance in your brokerage account.

If and when the funds remaining in your account are reduced by losses to below a certain level—known as the maintenance margin level—your broker will require that you deposit additional funds to bring the balance back to the level of the initial margin. Or you may be asked for additional margin if the exchange or your brokerage firm raises its mar-

gin requirements. Requests for additional margin are known as margin calls.

Assume, for example, that the initial margin needed to buy or sell a particular futures contract is \$2,000 and that the maintenance margin is \$1,500. Should losses on open positions reduce the funds remaining in your trading account to \$1,400 (an amount less than the maintenance requirement), you will receive a margin call for the \$600 needed to restore your account to \$2,000.

Before trading in futures contracts, be sure you understand your particular brokerage firm's Margin Agreement and how and when the firm expects margin calls to be met. Some firms may require only that you mail a personal check. Others may insist you wire transfer funds from your bank or provide same-day or next-day delivery of a certified or cashier's check. If margin calls are not met in the prescribed time and form, the brokerage firm can protect itself by liquidating your open positions at the available market price (possibly resulting in an unsecured loss for which you would be liable).

## Basic Trading Strategies

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Even if you should decide to participate in futures trading in a way that doesn't involve having to make day-to-day trading decisions about what and when to buy or sell (such as having a managed account or investing in a commodity pool), it is nonetheless useful to understand the dollars and cents of how futures trading gains and losses are realized. If you intend to trade your own account, such an understanding is essential.

Dozens of different strategies and variations of strategies are employed by futures traders in pursuit of speculative profits. Here are brief

descriptions and illustrations of the most basic strategies.

***Buying (Going Long) to Profit from an Expected Price Increase***

Someone expecting the price of a particular commodity to increase over a given period of time can seek to profit by *buying* futures contracts. If correct in forecasting the direction and timing of the price change, the futures contract can be sold later for the higher price, thereby yielding a profit.<sup>1</sup> If the price declines rather than increases, the trade will result in a loss. *Because of leverage, losses as well as gains may be larger than the initial margin deposit.*

For example, assume it's now January. The July crude oil futures price is presently quoted at \$15 a barrel and over the coming month you expect the price to increase. You decide to deposit the required initial margin of \$2,000 and buy one July crude oil futures contract. Further assume that by April the July crude oil futures price has risen to \$16 a barrel and you decide to take your profit by selling. Since each contract is for 1,000 barrels, your \$1 a barrel profit would be \$1,000 less transaction costs.

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|         |  | Price per barrel | Value of 1,000 barrel contract |
|---------|--|------------------|--------------------------------|
| January | Buy 1 July crude oil futures contract  | \$15.00          | \$15,000                       |
| April   | Sell 1 July crude oil futures contract | \$16.00          | \$16,000                       |
|         | Profit                                 | \$ 1.00          | \$ 1,000                       |

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<sup>1</sup>For simplicity, examples do not take into account commissions and other transaction costs. These costs are important. You should be sure you understand them.

Suppose, instead, that rather than rising to \$16 a barrel, the July crude oil price by April has declined to \$14 and that, to avoid the possibility of further loss, you elect to sell the contract at that price. On the 1,000 barrel contract your loss would come to \$1,000 plus transaction costs.

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|         |  | Price per barrel | Value of 1,000 barrel contract |
|---------|--|------------------|--------------------------------|
| January | Buy 1 July crude oil futures contract  | \$15.00          | \$ 15,000                      |
| April   | Sell 1 July crude oil futures contract | \$14.00          | \$ 14,000                      |
|         | Loss                                   | \$ 1.00          | \$ 1,000                       |

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Note that if at any time the loss on the open position had reduced funds in your margin account to below the maintenance margin level, you would have received a margin call for whatever sum was needed to restore your account to the amount of the initial margin requirement.

***Selling (Going Short) to Profit from an Expected Price Decrease***

The only way going short to profit from an expected price decrease differs from going long to profit from an expected price increase is the sequence of the trades. Instead of first buying a futures contract, you first sell a futures contract. If, as you expect, the price does decline, a profit can be realized by later purchasing an offsetting futures contract at the lower price. The gain per unit will be the amount by which the purchase price is below the earlier selling price. Margin requirements for selling a futures contract are the same as for buying a futures contract, and daily profits or losses are credited or debited to the account in the same way.

For example, suppose it's August and between now and year end you expect the overall level of stock prices to decline. The S&P 500 Stock Index is currently at 1200. You deposit an initial margin of \$15,000 and sell one December S&P 500 futures contract at 1200. Each one point change in the index results in a \$250 per contract profit or loss. A decline of 100 points by November would thus yield a profit, before transaction costs, of \$25,000 in roughly three months time. A gain of this magnitude on less than a 10 percent change in the index level is an illustration of leverage working to your advantage.

|          |  | S&P 500<br>Index | Value of Contract<br>(Index x \$250) |
|----------|--|------------------|--------------------------------------|
| August   | Sell 1 December<br>S&P 500 futures<br>contract | 1,200            | \$300,000                            |
| November | Buy 1 December<br>S&P 500 futures<br>contract  | 1,100            | \$275,000                            |
|          | Profit   | 100 pts.         | \$ 25,000                            |

Assume stock prices, as measured by the S&P 500, increase rather than decrease and by the time you decide to liquidate the position in November (by making an offsetting purchase), the index has risen to 1300, the outcome would be as follows:

|          |  | S&P 500<br>Index | Value of Contract<br>(Index x \$250) |
|----------|--|------------------|--------------------------------------|
| August   | Sell 1 December<br>S&P 500 futures<br>contract | 1,200            | \$300,000                            |
| November | Buy 1 December<br>S&P 500 futures<br>Contract  | 1,300            | \$325,000                            |
|          | Loss   | 100 pts.         | \$ 25,000                            |

A loss of this magnitude (\$25,000, which is far in excess of your \$15,000 initial margin deposit) on less than a 10 percent change in the index level is an illustration of leverage working to your disadvantage. It's the other edge of the sword.

### *Spreads*

While most speculative futures transactions involve a simple purchase of futures contracts to profit from an expected price increase—or an equally simple sale to profit from an expected price decrease—numerous other possible strategies exist. Spreads are one example.

A spread involves buying one futures contract in one month and selling another futures contract in a different month. The purpose is to profit from an expected change in the relationship between the purchase price of one and the selling price of the other.

As an illustration, assume it's now November, that the March wheat futures price is presently \$3.50 a bushel and the May wheat futures price is presently \$3.55 a bushel, a difference of 5¢. Your analysis of market conditions indicates that, over the next few months, the price difference between the two contracts should widen to become greater than 5¢. To profit if you are right, you could sell the March futures contract (the lower priced contract) and buy the May futures contract (the higher priced contract).

Assume time and events prove you right and that, by February, the March futures price has risen to \$3.60 and the May futures price is \$3.75, a difference of 15¢. By liquidating both contracts at this time, you can realize a net gain of 10¢ a bushel. Since each contract is 5,000 bushels, the net gain is \$500.

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|          |                                     |                                  |              |
|----------|-------------------------------------|----------------------------------|--------------|
| November | Sell March wheat<br>@ \$3.50 bushel | Buy May wheat<br>@ \$3.55 bushel | Spread<br>5c |
| February | Buy March wheat<br>@ \$3.60         | Sell May wheat<br>@ \$3.75       | 15c          |
|          | <hr/>                               | <hr/>                            |              |
|          | \$ .10 loss                         | \$ .20 gain                      |              |
|          | Net gain 10¢ bushel                 |                                  |              |
|          | Gain on 5,000 bushel contract \$500 |                                  |              |

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Had the spread (i.e., the price difference) narrowed by 10¢ a bushel rather than widened by 10¢ a bushel, the transactions just illustrated would have resulted in a loss of \$500.

Virtually unlimited numbers and types of spread possibilities exist, as do many other, even more complex futures trading strategies. These are beyond the scope of an introductory booklet and should be considered only by someone who clearly understands the risk/reward arithmetic involved.

## Participating in Futures Trading

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Now that you have an overview of what futures markets are, why they exist and how they work, the next step is to consider various ways in which you may be able to participate in futures trading. There are a number of alternatives and the only best alternative—if you decide to participate at all—is whichever one is best for you. In addition to describing several possibilities, the pages that follow suggest questions you should ask and information you should obtain before making a decision. Also discussed is the opening of a futures trading account, the regulatory safeguards provided participants in futures markets, and methods for resolving disputes, should they arise.

### *Deciding How to Participate*

At the risk of oversimplification, choosing a method of participation is largely a matter of deciding how directly and extensively you, personally, want to be involved in making trad-

ing decisions and managing your account. Many futures traders prefer to do their own research and analysis and make their own decisions about what and when to buy and sell. That is, they manage their own futures trades in much the same way they may manage their own stock portfolios. Others choose to rely on or at least consider the recommendations of a brokerage firm or account executive. Some purchase independent trading advice. Others would rather have someone else be responsible for trading their account and therefore delegate trading authority to their broker or a trading advisor. Still others purchase an interest in a commodity trading pool.

There's no formula for deciding. Your decision should, however, take into account such things as your knowledge of and any previous experience in futures trading, how much time and attention you are able to devote to trading, the amount of capital you can afford to commit to futures and your individual temperament and tolerance for risk. The importance of the latter cannot be overemphasized. Some individuals thrive on being directly involved in the fast pace of futures trading. Others are unable, reluctant or lack the time to make the immediate decisions that are frequently required. Some recognize and accept the fact that futures trading all but inevitably involves having some losing trades. Others lack the necessary disposition or discipline to acknowledge that they were wrong on a particular occasion and liquidate the position.

Many experienced traders thus suggest that, of all the things you need to know before trading in futures contracts, one of the most important is to know yourself. This can help you make the right decision about whether to participate at all and, if so, in what way.

*In no event should you participate in futures trading unless the capital you would commit is risk capital.* That is, capital which, in pur-

suit of larger profits, you can afford to lose. It should be capital over and above that needed for necessities, emergencies, savings and achieving your long-term investment objectives. You should also understand that, because of the leverage involved in futures, the profit and loss fluctuations may be wider than in most types of investment activity and you may be required to cover deficiencies due to losses over and above what you had expected to commit to futures.

#### *Trade Your Own Account*

This involves opening your individual trading account and—with or without the recommendations of a brokerage firm or an independent Commodity Trading Advisor—making your own trading decisions. You will also be responsible for assuring that adequate funds are on deposit with the brokerage firm for margin purposes, and that additional funds are promptly provided as needed.

Most major brokerage firms have departments or even separate divisions to serve clients who want to allocate some portion of their investment capital to futures trading. Some firms specialize exclusively in futures trading. All brokerage firms conducting futures business with the public must be registered as Futures Commission Merchants or Introducing Brokers with the Commodity Futures Trading Commission (CFTC), the independent regulatory agency of the federal government that administers the Commodity Exchange Act, and must be Members of National Futures Association (NFA), the industrywide self-regulatory organization.

Different firms offer different services. Some have extensive research departments and can provide current information and analysis concerning market developments as well as specific trading suggestions. Others tailor their services to clients who prefer to make market judgments and arrive at trading decisions on

their own. Still others offer various combinations of these and other services.

An individual trading account can be opened either directly with a Futures Commission Merchant or through an Introducing Broker. Whichever course you choose, the account itself will be carried by a Futures Commission Merchant, as will your money. Futures Commission Merchants are required to maintain the funds and property of their customers in segregated accounts, separate from the firm's own money. Introducing Brokers do not accept or handle customer funds but most offer a variety of trading-related services.

Along with the particular services a firm provides, discuss the commissions and trading costs that will be involved. You should clearly understand how the firm requires that any margin calls be met. If you have a question about whether a firm is properly registered with the CFTC and is a Member of NFA, you should contact NFA's Information Center toll-free at (800) 621-3570 or check them out by visiting NFA's online Background Affiliation Status Information Center (BASIC) at NFA's web site ([www.nfa.futures.org](http://www.nfa.futures.org)).

#### *Have Someone Manage Your Account*

A managed account is also your individual account. The major difference is that you give someone else—an account manager—written power of attorney to make and execute decisions about what and when to trade. He or she will have discretionary authority to buy or sell for your account. You, of course, remain fully responsible for any losses that may be incurred.

Although an account manager is likely to be managing the accounts of other persons at the same time, there is no sharing of gains or losses of other customers. Trading gains or losses in your account will result solely from trades that were made for your account.

Most Futures Commission Merchants and Introducing Brokers accept managed accounts or can assist in placing your investment with a professional account manager with whom the firm has a relationship. In most instances, the amount of money needed to open a managed account is larger than the amount required to establish an account you intend to trade yourself. Different firms and account managers, however, have different requirements and the range can be quite wide. Be certain to read and understand all of the literature and agreements you receive from the broker.

Some account managers have their own trading approaches and accept only clients to whom that approach is acceptable. Others tailor their trading to a client's objectives. In either case, obtain enough information and ask enough questions to assure yourself that your money will be managed in a way that's consistent with your goals and risk tolerance.

In addition to commissions on trades made for your account, it is not uncommon for account managers to charge a management fee, and/or there may be some arrangement for the manager to participate in the net profits that his management produces. These charges are required to be fully disclosed in advance. Make sure you know about every charge to be made to your account and what each charge is for.

Account managers associated with a Futures Commission Merchant or Introducing Broker must meet certain experience requirements if the account is to be traded on a discretionary basis.

Many Commodity Trading Advisors offer managed accounts. The account itself, however, must still be with a Futures Commission Merchant and in your name, with the advisor designated in writing to make and execute trading decisions on a discretionary basis.

CFTC Regulations require that Commodity Trading Advisors that manage accounts provide their customers, in advance, with what is called a Disclosure Document. Read it carefully and ask the Commodity Trading Advisor to explain any points you don't understand. Your money is important to you; so is the information contained in the Disclosure Document!

While there can be no assurance that past performance will be indicative of future performance, it can be useful to inquire about the track record of an account manager you are considering.

The Disclosure Document contains information about the advisor, his experience and his current (and any previous) performance records. If you use an advisor to manage your account, he must first obtain a signed acknowledgment from you that you have received and understood the Disclosure Document. As in any method of participating in futures trading, discuss and understand the advisor's fee arrangements.

Take note of whether the account management agreement includes a provision to automatically liquidate positions and close out the account if and when losses exceed a certain amount. You should know and agree on what will be done with profits, and what, if any, restrictions apply to withdrawals from the account.

Commodity Trading Advisors who manage accounts must be registered as such with the CFTC and must also be Members of NFA. You can verify that these requirements have been met by calling NFA toll-free at (800) 621-3570 or by checking NFA's online BASIC system.

### *Participate in a Commodity Pool*

Another alternative method of participating in futures trading is through a commodity pool, which is similar in concept to a common

stock mutual fund. It is the only method of participation in which you will not have your own individual trading account. Instead, your money will be combined with that of other pool participants and traded as a single account. You share in the profits or losses of the pool in proportion to your investment in the pool. One potential advantage is greater diversification among commodities than you might obtain if you were to establish your own trading account. Another is that your risk of loss is generally limited to your investment in the pool, because most pools are formed as limited partnerships. And you won't be subject to margin calls.

Bear in mind, however, that the risks a pool incurs in any given futures transaction are no different than the risks incurred by an individual trader. The pool still trades in futures contracts which are highly leveraged and in markets that can be highly volatile. And like an individual trader, the pool can suffer substantial losses as well as realize substantial profits. A major consideration, therefore, is who will be managing the pool in terms of directing its trading.

While a pool must execute all of its trades through a brokerage firm registered with the CFTC as a Futures Commission Merchant, it may or may not have any other affiliation with the brokerage firm. Some brokerage firms, to serve those customers who prefer to participate in commodity trading through a pool, either operate or have a relationship with one or more commodity trading pools. Other pools operate independently.

A Commodity Pool Operator cannot accept your money until it has provided you with a Disclosure Document that contains information about the pool operator, the pool's principals and any outside persons who will be providing trading advice or making trading decisions. It must also disclose extensive past

performance records of the pool or its principals. Disclosure Documents contain important information and should be carefully read before you invest your money. Another requirement is that the Disclosure Document advise you of the risks involved.

In the case of a new pool, there is frequently a provision that the pool will not begin trading until (and unless) a certain amount of money is raised. Normally, a time deadline is set and the Commodity Pool Operator is required to state in the Disclosure Document what that deadline is (or, if there is none, that the time period for raising funds is indefinite). Be sure you understand the terms, including how your money will be invested in the meantime, what interest you will earn (if any), and how and when your investment will be returned in the event the pool does not commence trading.

Determine whether you will be responsible for any losses in excess of your investment in the pool. If so, this must be indicated prominently at the beginning of the pool's Disclosure Document.

Ask about fees and other costs, including whether any initial charges will be made against your investment for organizational or administrative expenses. Such information should be noted in the Disclosure Document along with a break-even analysis to indicate how much profit the pool must make in the first year to cover its fees. You should also determine from the Disclosure Document how the pool's operator and advisor are compensated. Understand, too, the procedure for redeeming your shares in the pool, any restrictions that may exist, and provisions for liquidating and dissolving the pool if more than a certain percentage of the capital were to be lost.

Ask about the pool operator's general trading philosophy, what types of contracts will be traded, whether they will be day-traded, etc.

With few exceptions, Commodity Pool Operators must be registered with the CFTC and be Members of NFA. You can verify that these requirements have been met by calling NFA toll-free at (800) 621-3570 or by checking NFA's online BASIC system.

### *Regulation of Futures Trading*

Firms and individuals that conduct futures trading business with the public are subject to regulation by the CFTC and by NFA. All U.S. futures exchanges are regulated by the CFTC.

NFA is a congressionally authorized self-regulatory organization subject to CFTC oversight. It exercises regulatory authority over Futures Commission Merchants, Introducing Brokers, Commodity Trading Advisors, Commodity Pool Operators and Associated Persons (salespersons) of all of the foregoing. NFA staff includes nearly 150 field auditors and investigators. In addition, NFA is responsible for registering persons and firms required to be registered with the CFTC, including exchange floor brokers and traders.

Firms and individuals that violate NFA rules of professional ethics and conduct or that fail to comply with strictly enforced financial and record-keeping requirements can, if circumstances warrant, be permanently barred from engaging in any futures-related business with the public. The enforcement powers of the CFTC are similar to those of other major federal regulatory agencies, including the power to seek criminal prosecution by the Department of Justice where circumstances warrant such action.

Futures Commission Merchants which are members of an exchange are subject to not only CFTC and NFA regulation but to regulation by the exchanges of which they are members. Exchange regulatory staffs are responsible, subject to CFTC oversight, for the business conduct and financial responsibility of their member firms. Violations of exchange

rules can result in substantial fines, suspension or expulsion from exchange membership.

*Words of Caution*

It is generally against the law for any person or firm to offer futures contracts or options on futures contracts for purchase or sale unless those contracts are traded on a regulated futures exchange and unless the person or firm is registered with the CFTC. Moreover, persons and firms conducting futures-related business with the public must be Members of NFA. Thus, be extremely cautious if approached by someone attempting to sell you a commodity-related investment unless you are able to verify that these requirements are met.

Be at least equally cautious of anyone soliciting the retail public for investments in non-exchange traded, foreign exchange (Forex) contracts. If you invest without first carefully checking out the firm promoting them, you and your money could quickly become strangers! Contact the CFTC, NFA, the Securities and Exchange Commission (SEC), or the securities regulatory agency or attorney general in your state. If you wait until after your investment—and possibly the firm itself—are gone, there's generally little anyone can do to help you recover it.

Other sales pitches that should raise warning flags include: Investments in illegal off-exchange futures contracts that may be called by different names such as “deferred delivery,” “forward” or “partial payment” contracts in an attempt to avoid the strict laws applicable to regulated futures trading. Firms peddling these often operate out of telephone boiler rooms, employ high-pressure selling tactics, and may state that they are exempt from registration and regulatory requirements. That, in itself, should be reason enough to conduct a check before writing a check.

You can quickly verify whether a particular firm or person is currently registered with

CFTC and is an NFA Member by phoning NFA toll-free at (800) 621-3570 or checking NFA's online BASIC system. You can also inquire as to whether a firm or person has been the subject of disciplinary actions by the CFTC, NFA or an exchange.

### *Establishing an Account*

At the time you apply to establish a futures trading account, you can expect to be asked for certain information beyond simply your name, address and phone number. The requested information will generally include (but not necessarily be limited to) your income, net worth, what previous investment or futures trading experience you have had, and any other information needed in order to advise you of the risks involved in trading futures contracts. At a minimum, the person or firm who will handle your account is required to provide you with risk disclosure documents or statements specified by the CFTC and obtain written acknowledgment that you have received and understood them.

Opening a futures account is a serious decision—no less so than making any major financial investment—and should obviously be approached as such. Just as you wouldn't consider buying a car or a house without carefully reading and understanding the terms of the contract, neither should you establish a trading account without first reading and understanding the Account Agreement and all other documents supplied by your broker. It is in your interest and the firm's interest that you clearly know your rights and obligations as well as the rights and obligations of the firm with which you are dealing before you enter into any futures transaction. If you have questions about what the provisions of the Agreement mean, don't hesitate to ask. A good and continuing relationship can exist only if both parties have, from the outset, a clear understanding of the relationship.

Nor should you be hesitant to ask, in advance, what services you will be getting for the trading commissions the firm charges. As indicated earlier, not all firms offer identical services. And not all clients have identical needs. If it is important to you, for example, you might inquire about the firm's research capability and whatever reports it makes available to clients. Other subjects of inquiry could be how transaction and statement information will be provided, and how your orders will be handled and executed.

*If a Dispute Should Arise*

All but a small percentage of transactions involving regulated futures contracts take place without problems or misunderstandings. However, in any business in which millions of contracts are traded each year, occasional disagreements are inevitable. Obviously, the best way to resolve a disagreement is through direct discussions by the parties involved. Failing this, however, participants in futures markets have several alternatives (unless some particular method has been agreed to in advance).

One option is to file a claim for reparations at the CFTC. However, a more informal, and generally faster, alternative is to resolve the dispute through arbitration, either at the exchange where the contracts were traded or at NFA. There are several advantages to NFA arbitration:

- You do not have to use an attorney.
- You can state your claim in your own words without citing any law or rule.
- You can elect, if you prefer, to have a majority of arbitrators who have no connection with the futures industry.
- Parties to an NFA arbitration can seek resolution through NFA's mediation program at no additional charge.

- In some cases, it may be possible to conduct arbitration entirely through written submissions. If a hearing is required, NFA can hold hearings in many metropolitan areas throughout the country.

For an explanation of the arbitration program and how it works, contact NFA for a free copy of *NFA Arbitration: Resolving Customer Disputes*.

## What to Look for in a Futures Contract

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No matter what type of investment you are considering, begin by obtaining as much information as possible about that particular investment. The more you know in advance, the less likely there will be surprises later on. Moreover, even among futures contracts, there are important differences which—because they can affect your investment results—should be taken into account in making your investment decisions. Specifically, be certain you understand such things as:

### *The Contract Unit*

Futures contracts specify such things as the unit of trading and contract size (such as 5,000 bushels of grain, 40,000 pounds of livestock, or 100 troy ounces of gold). Foreign currency futures specify the number of marks, francs or pesos. U.S. Treasury obligation futures are in terms of instruments having a stated face value (such as \$100,000 or \$1 million) at maturity. Stock index futures contracts that call for cash settlement rather than delivery are based on a given index number times a specified dollar multiple. Whatever the yardstick, it's important to know precisely what it is you would be buying or selling, and the quantity you would be buying or selling.

### *Order Placement*

Nothing is more important in futures trading than clearly communicating with your brokerage firm about what you want to buy or sell,

when you want to buy or sell, and any other conditions or limitations you may want to attach to your order. For example, if you want to buy or sell immediately at the best available price, whatever that happens to be, this is known simply as a “market” order. But there are many other types of orders that give the broker specific instructions about when and/or at what price to execute a purchase or sale. Your order instructions can specify not only when and at what price you are willing to establish a futures position but also include instructions about when and at what price, if possible, you want to liquidate the position. You also need to let the broker know whether you intend for an order to be a “day” order (valid for that day only) or an “open” order (one that remains in effect until such time as it can be executed according to your instructions). Ask the brokerage firm you’re dealing with whether it can provide you with a written glossary of the various types of orders it and the exchanges can accept. Some firms offer recordkeeping books and online resources that can be handy for tracking your orders, executions, and open positions. Finally, be sure you have a full understanding of your firm’s order entry procedures.

#### *How Prices are Quoted*

Futures prices are usually quoted the same way prices are quoted in the cash market; in dollars, cents, and sometimes fractions of a cent, per bushel, pound or ounce; in points and percentages of a point for financial instruments; and in terms of an index number, for stock index contracts. Be certain you understand the price quotation system for the particular futures contract you are considering.

#### *Minimum Price Changes*

Exchanges establish the minimum amount that the price can fluctuate upward or downward. This is known as the “tick.” For example, each tick for grain is  $\frac{1}{4}$ ¢ per bushel. On a 5,000 bushel futures contract, that’s \$12.50.

On a gold futures contract, the tick is 10¢ per ounce, which on a 100 ounce contract is \$10. You'll want to familiarize yourself with the minimum price fluctuation—the tick size—for whatever futures contracts you plan to trade. You'll need to know how a price change of any given amount will affect the value of the contract.

### *Daily Price Limits*

Exchanges establish daily price limits for trading in futures contracts. The limits are stated in terms of the previous day's closing price plus or minus so many cents or dollars per trading unit. Once a futures price has increased by its daily limit, there can be no trading at any higher price until the next day of trading. Conversely, once a futures price has declined by its daily limit, there can be no trading at any lower price until the next day of trading. Thus, if the daily limit for a particular grain is currently 20¢ a bushel and the previous day's settlement was \$3, there can not be trading during the current day at any price below \$2.80 or above \$3.20. The price is allowed to increase or decrease by the limit amount each day.

For some contracts, daily price limits are eliminated during the month in which the contract expires. Because prices can become particularly volatile during the expiration month (also called the "delivery" or "spot" month), persons lacking experience in futures trading may wish to liquidate their positions prior to that time. Or, at the very least, trade cautiously and with an understanding of the risks that may be involved.

Daily price limits set by the exchanges are subject to change. They can be either increased or decreased. Because of daily price limits, there may be occasions when it is not possible to liquidate an existing futures position at will. In this event, possible alternative strategies should be discussed with a broker.

### *Position Limits*

Although the average trader is unlikely to ever approach them, the exchanges and the CFTC establish limits on the maximum speculative position that any one person can have at one time in any one futures contract. The purpose is to prevent one buyer or seller from being able to exert undue influence on the price in either the establishment or liquidation of positions. Position limits are stated in number of contracts or total units of the commodity.

The easiest way to obtain the types of information just discussed is from your broker or from the exchange where the contract is traded.

## Understanding (and Managing) the Risks of Futures Trading

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Anyone buying or selling futures contracts should clearly understand that any given transaction may result in a loss. The loss may exceed not only the amount of the initial margin but also the entire amount deposited in the account or more. Moreover, while there are a number of steps that can be taken in an effort to limit the size of possible losses, there can be no guarantees these steps will prove effective. Well-informed futures traders should be familiar with available risk management possibilities.

### *Choosing a Futures Contract*

Just as different common stocks or different bonds may involve different degrees of probable risk and reward at a particular time, so may different futures contracts. The market for one commodity may, at present, be highly volatile, perhaps because of supply-demand uncertainties which—depending on future developments—could suddenly propel prices sharply higher or sharply lower. The market for some other commodity may currently be less volatile, with greater likelihood that prices will fluctuate in a narrower range. You should

be able to evaluate and choose the futures contracts that appear—based on present information—most likely to meet your objectives, your willingness to accept risk and your expectations as to when the anticipated price change will occur.

Keep in mind, however, that neither past nor present price behavior provides assurance of what will occur in the future. Prices that have been relatively stable may become highly volatile (which is why many individuals and firms choose to hedge against the possibility of future price changes).

### *Liquidity*

There can be no ironclad assurance that, at all times, a liquid market will exist for offsetting a futures contract that you have previously bought or sold. This could be the case, if a futures price has increased or decreased by the maximum allowable daily limit and there is no one presently willing to buy the futures contract you want to sell or sell the futures contract you want to buy.

Even on a day-to-day basis, some contracts and some delivery months tend to be more actively traded and liquid than others. Two useful indicators of liquidity are the volume of trading and the open interest (the number of open futures positions still remaining to be liquidated by an offsetting trade or satisfied by delivery). These figures are usually reported in newspapers that carry futures quotations. The information is also available from your broker or advisor and from online market reporting services and exchange web sites.

### *Stop Orders*

A stop order is an order, placed with your broker, to buy or sell a particular futures contract at the market price if and when the price reaches a specified level. Stop orders are often used by futures traders in an effort to limit the amount they might lose if the futures price moves against their position. For example,

were you to purchase a crude oil futures contract at \$15 a barrel and wished to limit your loss to \$1 a barrel, you might place a stop order to sell an offsetting contract if the price should fall to \$14 a barrel. If and when the market reaches whatever price you specify, a stop order becomes an order to execute the desired trade at the best price immediately obtainable.

There can be no guarantee, however, that it will be possible under all market conditions to execute the order at the price specified. In an active, volatile market, the market price may be declining (or rising) so rapidly that there is no opportunity to liquidate your position at the stop price you have designated. Under these circumstances, the broker's only obligation is to execute your order at the best price that is available.

In the event prices have risen or fallen by the maximum daily limit, and there is presently no trading in the contract (known as a "lock limit" market), it may not be possible to execute your order at any price. In addition, although it happens infrequently, it is possible that markets may be lock limit for more than one day, resulting in substantial losses to futures traders who may find it impossible to liquidate losing futures positions.

Subject to the kinds of limitations just discussed, stop orders can nonetheless provide a useful tool for the futures trader who seeks to limit his losses. Far more often than not, it will be possible for the broker to execute a stop order at or near the specified price.

In addition to providing a way to limit losses, stop orders can also be employed to protect profits. For instance, if you have bought crude oil futures at \$15 a barrel and the price is now at \$19 a barrel, you might wish to place a stop order to sell if and when the price declines to \$18. This (again subject to the described limitations of stop orders) could protect \$3 of

your existing \$4 profit while still allowing you to benefit from any continued increase in price.

### **Spreads**

As previously discussed, spreads involve the purchase of one futures contract and the sale of a different futures contract in the hope of profiting from a widening or narrowing of the price difference. Because gains and losses occur only as the result of a change in the price difference—rather than as a result of a change in the overall level of futures prices—spreads are often considered more conservative and less risky than having an outright long or short futures position. In general, as long as you are trading the same number of futures contracts, this may be the case.

It should be recognized, though, that the loss from a spread can be as great as—or even greater than—that which might be incurred by having an outright futures position. An adverse widening or narrowing of the spread during a particular time period may exceed the change in the overall level of futures prices, and it is possible to experience losses on both of the futures contracts involved (that is, on both legs of the spread).

## **Options on Futures Contracts**

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What are known as put and call options are traded on most active futures contracts. The principal attraction of buying options is that they make it possible to speculate on increasing or decreasing futures prices with a known and limited risk. The most that the buyer of an option can lose is the cost of purchasing the option (known as the option “premium”) plus transaction costs.

Options can be most easily understood when call options and put options are considered separately, because they are totally separate and distinct. Buying or selling a call in no way

involves a put, and buying or selling a put in no way involves a call.

### ***Buying Call Options***

The buyer of a call option acquires the right, but not the obligation, to purchase (go long) a particular futures contract at a specified price at any time during the life of the option. Each option specifies the futures contract which may be purchased (known as the “underlying” futures contract) and the price at which it can be purchased (known as the “exercise” or “strike” price).

A March Treasury bond 92 call option would convey the right to buy one March U.S. Treasury bond futures contract at a price of \$92,000 at any time during the life of the option.

One reason for buying call options is to profit from an anticipated increase in the underlying futures price. A call option buyer will realize a net profit if, upon exercise, the underlying futures price is above the option exercise price by more than the premium paid for the option. Or a profit can be realized if, prior to expiration, the option rights can be sold for more than they cost.

Example: You expect lower interest rates to result in higher bond prices (interest rates and bond prices move inversely). To profit if you are right, you buy a June Tbond 90 call. Assume the premium you pay is \$2,000.

If, at the expiration of the option (in May) the June Tbond futures price is 93, you can realize a gain of three (that's \$3,000) by exercising or selling the option that was purchased at 90. Since you paid \$2,000 for the option, your net profit is \$1,000 less transaction costs.

As mentioned, the most that an option buyer can lose is the option premium plus transaction costs. Thus, in the preceding example, the most you could have lost—no matter how wrong you might have been about the direction and timing of interest rates and bond prices—would have been the \$2,000 premium you paid for the option plus transaction costs. In contrast, if you had an outright long position in the underlying futures contract your potential loss would be unlimited.

It should be pointed out, however, that while an option buyer has a limited risk (the loss of the option premium), his profit potential is reduced by the amount of the premium. In the example, the option buyer realized a net profit of \$1,000. For someone with an outright long position in the June T-bond futures contract, an increase in the futures price from 90 to 93 would have yielded a net profit of \$3,000 less transaction costs.

Although an option buyer cannot lose more than the premium paid for the option, he can lose the entire amount of the premium. This will be the case if an option held until expiration is not worthwhile to exercise.

### ***Buying Put Options***

Whereas a call option conveys the right to purchase (go long) a particular futures contract at a specified price, a put option conveys the right to sell (go short) a particular futures contract at a specified price. Put options can be purchased to profit from an anticipated price decrease. As in the case of call options, the most that a put option buyer can lose, if he is wrong about the direction or timing of the price change, is the option premium plus transaction costs.

**Example:** Expecting a decline in the price of gold, you pay a premium of \$1,000 to purchase an April 300 gold put option. The option gives you the

right to sell a 100 ounce gold futures contract for \$300 an ounce.

Assume that, at expiration, the April futures price has—as you expected—declined to \$280 an ounce. The option giving you the right to sell at \$300 can thus be sold or exercised at a gain of \$20 an ounce. On 100 ounces, that's \$2,000. After subtracting \$1,000 paid for the option, your net profit comes to \$1,000.

Had you been wrong about the direction or timing of a change in the gold futures price, the most you could have lost would have been the \$1,000 premium paid for the option plus transaction costs. However, you could have lost the entire premium.

#### *How Option Premiums are Determined*

Option premiums are determined the same way futures prices are determined, through active competition between buyers and sellers. Three major variables influence the premium for a given option:

- The option's exercise price, or more specifically, the relationship between the exercise price and the current price of the underlying futures contract. All else being equal, an option that is already worthwhile to exercise (known as an "in-the-money" option) commands a higher premium than an option that is not yet worthwhile to exercise (an "out-of-the-money" option). For example, if a gold contract is currently selling at \$290 an ounce, a put option conveying the right to sell gold at \$310 an ounce is more valuable than a put option that conveys the right to sell gold at only \$280 an ounce.
- The length of time remaining until expiration. All else being equal, an option with a long period of time remaining until expiration commands a higher premium than an

option with a short period of time remaining until expiration because it has more time in which to become profitable. Said another way, an option is an eroding asset; its time value declines as it approaches expiration.

- The volatility of the underlying futures contract. All else being equal, the greater the volatility the higher the option premium. In a volatile market, the option stands a greater chance of becoming profitable.

### *Selling Options*

At this point, you might well ask, who sells the options that option buyers purchase? The answer is that options are sold by other market participants known as option writers, or grantors. Their sole reason for writing options is to earn the premium paid by the option buyer. If the option expires without being exercised (which is what the option writer hopes will happen), the writer retains the full amount of the premium.

It should be emphasized and clearly recognized, however, that unlike an option buyer who has a limited risk (the loss of the option premium), the writer of an option has unlimited risk. His loss, except to the extent offset by the premium received when the option was written, will be whatever amount the option is “in-the-money” at the time of expiration. Simply said, any profit realized by an option buyer represents a loss for the option seller. And, it’s worth saying again, there is no limit on how large this loss can be!

The foregoing is, at most, a brief and incomplete discussion of a complex topic. Options trading has its own vocabulary and its own arithmetic. If you wish to consider trading in options on futures contracts, you should discuss the possibility with your broker and read and thoroughly understand the risk disclosure statement which he is required to provide. In addition, have your broker provide you with

educational and other literature prepared by the exchanges on which options are traded. Or contact the exchange directly. A number of excellent publications are available, including *Options on Futures Contracts: An Introduction*, which can be obtained by calling NFA's Information Center toll-free at (800) 621-3570 or by visiting NFA's web site at [www.nfa.futures.org](http://www.nfa.futures.org)

## In Closing

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This booklet ends where it began, with the statement that it is not our intention to suggest either that you should or should not participate in futures markets. Low margins, high leverage, frequently volatile prices, and the continuing needs of hedgers to manage the price uncertainties inherent in their business create *opportunities* to realize potentially substantial profits. But for each such opportunity, there is commensurate *risk*. Futures trading, as stated at the outset, is not for everyone.

Hopefully, the preceding pages have helped to provide a better understanding of the opportunities and the risks alike, as well as an understanding of what futures markets are, how they work, who uses them, alternative methods of participation and the vital economic function that futures markets perform.

In no way, it should be emphasized, should anything discussed herein be considered trading advice or recommendations. That should be provided by your broker or advisor. Similarly, your broker or advisor—as well as the exchanges where futures contracts are traded—are your best sources for additional, more detailed information about futures trading.

## Glossary

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**Call Option** The buyer of a call option acquires the right but not the obligation to purchase a particular futures contract at a stated price on or before a particular date.

**Commission** A fee charged by a broker to a customer for performance of a specific duty, such as the buying or selling of futures contracts.

**Futures Contract** A legally binding agreement to buy or sell a commodity or financial instrument at a later date. Futures contracts are standardized according to the quality, quantity and delivery time and location for each commodity.

**Hedging** The practice of offsetting the price risk inherent in any cash market position by taking the opposite position in the futures market. Hedgers use the market to protect their businesses from adverse price changes.

**Leverage** The ability to control large dollar amounts of a commodity with a comparatively small amount of capital.

**Liquidity (Liquid Market)** A broadly traded market where buying and selling can be accomplished with small price changes and bid and offer price spreads are narrow.

**Long** One who has bought futures contracts or owns a cash commodity.

**Margin** An amount of money deposited by both buyers and sellers of futures contracts and by sellers of option contracts to ensure performance of the terms of the contract (the making or taking delivery of the commodity or the cancellation of the position by a subsequent offsetting trade). Margin in futures is not a down payment, as in securities, but rather a performance bond.

**Offset** To take a second futures or options position opposite to the initial or opening position.

**Option Contract** A contract which gives the buyer the right, but not the obligation, to buy or sell a specified quantity of a commodity at a specific price within a specified period of time. The seller of the option has the obligation to sell the commodity or futures contract or buy it from the option buyer at the exercise price if the option is exercised.

**Option Premium** The price a buyer pays for an option. Premiums are arrived at through open competition between buyers and sellers on the trading floor of the exchange.

**Position Limit** The maximum number of speculative futures contracts one can hold as determined by the Commodity Futures Trading Commission and/or the exchange where the contract is traded.

**Price Limit** The maximum advance or decline from the previous day's settlement price permitted for a futures contract in one trading session.

**Put Option** An option that gives the option buyer the right but not the obligation to sell the underlying futures contract at a particular price on or before a particular date.

**Short** One who has sold futures contracts or the cash commodity.

**Speculator** One who tries to profit from buying and selling futures and options contracts by anticipating future price movements.

**Spot** Usually refers to a cash market price for a physical commodity that is available for immediate delivery.

**Spreading** The simultaneous buying and selling of two related markets in the expectation that a profit will be made when the position is offset.

**Strike Price** The price at which the buyer of a call (put) option may choose to exercise his right to purchase (sell) the underlying futures contract.

**Note**

The Commodity Futures Trading Commission requires that brokers provide their customers with specific risk disclosure statements prior to the opening of an account. This brochure is in no way intended to serve as a substitute for those statements.

## NFA Information and Resources

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***Information Center:***

800-621-3570

***World Wide Web:***

<http://www.nfa.futures.org>

NFA's web site offers information regarding the Association's history and organizational structure. NFA Members also will find the current issues of the Member newsletter and Activity Report, Notices to Members and rule interpretations. The investing public can order publications to help them understand the commodity futures industry as well as their rights and responsibilities as market participants. All visitors to NFA's web site can ask questions, make comments and order publications via e-mail.

***BASIC:***

<http://www.nfa.futures.org/basic/about.asp>

Anyone with access to the Internet is able to perform online background checks on the firms and individuals involved in the futures industry by using NFA's Background Affiliation Status Information Center (BASIC). NFA, the CFTC and the U.S. futures exchanges have supplied BASIC with information on CFTC registration, NFA membership, futures-related disciplinary history and non-disciplinary activities such as CFTC reparations and NFA arbitration.

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