Gains and Losses on Futures Contracts

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that amount would immediately be credited to his or her account and, unless required for other purposes, could be withdrawn.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

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

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