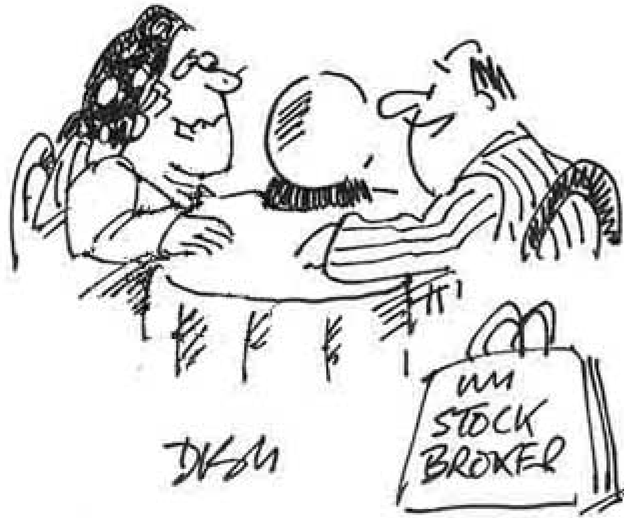
The Futures Market



"I'm in futures too."

"Wheat futures for May delivery fell 63.25 cents, or 5.1 percent, to $11.8675 a bushel at 10:51 a.m. on the Chicago Board of Trade. Most-active futures touched $13.495 yesterday, the seventh record this month. Wheat is up 34 percent this year on speculation global farmers wouldn't grow enough to meet demand"

– Source: Tony C. Dreibus, Bloomberg - February 28, 2008

"Crude-oil futures rallied more than $1 on Tuesday to close at a new high of $100.88 a barrel as cold weather in the U.S. continued. Heating oil also surged to a new record."

– Source: Morning Zhou, MarketWatch - February 26, 2008

"Chocolate makers, already beset by escalating dairy prices, are likely to encounter a bittersweet Valentine's Day. The culprit: a recent surge in the price of cocoa. Raw cocoa futures for March delivery closed up $33 at $2,454 a metric ton on Wednesday, after reaching as high as $2,471 a ton. The gains on New York's Intercontinental Exchange punctuate a steep, three-week run that has pushed the near-term contract to its highest closing level since April 1985."

– Source: Laura Mandaro, MarketWatch - February 13, 2008

Many investors' portfolios today include securities such as equity, bonds and mutual funds, however, there are a vast number of financial instruments that exist in the investment world which are far more complex in nature. One such instrument is the futures contract, or simply futures.

So what exactly is a futures contract? A futures contract is an agreement between two parties to buy or sell financial instruments or physical commodities for future delivery, at a specified price. A simple example will illustrate. Let's assume you decide to subscribe to your favourite magazine. To do so, you agree to pay the publishing company a certain price (annual subscription fee) to receive the magazine every month for the next year. This is similar to a futures contract in that the price and delivery terms are defined today, for a product you will receive in the future. By so doing, you reduce your risk of higher subscription prices by locking in the current annual

subscription fee today. In the same manner, a farmer and a flour producer may enter into a futures contract entailing delivery of 5,000 bushels of wheat in six months time at an agreed upon price of $10 per bushel. This contract is what can be bought and sold in the futures market.

Note that in every futures contract there exists two parties or positions: a short position and a long position. The participant agreeing to sell or deliver a commodity is the holder of the short position while the participant agreeing to buy or receive a commodity is the holder of the long position. Therefore, in our example above, the farmer would be in the short position and the flour producer the holder of the long position.

While trading in commodities began in Japan in the 18th century with the trading of rice and silk, today, there are many different commodity exchanges worldwide to include the trading of various products, a few of which are listed below.

Exchange	Abbreviation	Product Types
CME Group (formerly CBOT and CME)	CME	Agriculture, Biofuels, Precious Metals, Livestock, Equity Index, Foreign Exchange, Interest Rate
IntercontinentalExchange	ICE	Agriculture, Energy, Indices, Foreign Exchange
London Metal Exchange	LME	Industrial Metals, Plastics
New York Board of Trade	NYBOT	Agriculture, Biofuels
New York Mercantile Exchange	NYMEX	Agriculture, Energy, Precious Metals, Industrial Metals
Tokyo Commodity Exchange	TOCOM	Energy, Precious Metals, Industrial Metals, Rubber

Futures contracts are highly standardized by specifying all of the contract details such as: the underlying asset or financial instrument, the contract size and the specific price per unit, the grade or quality of the commodity, the type of settlement whether cash-settled or physical delivery, the minimum price movement also known as the commodity tick, the daily price limit and the last trading date. Let’s take a closer look at the commodity tick and daily price limit and how they can affect the profits and losses on contracts.

As previously mentioned the minimum permissible amount that the price increment on a futures contract can move, upwards or downwards, is known as the tick. These minimums are set by the futures exchanges and are important because they determine how much can be gained or lost on a particular contract in one day. Let’s assume that you had a wheat futures contract for 5,000 bushels and that the tick size for wheat futures was a quarter of one U.S. cent per bushel. This would mean that a minimum of US$12.50 ($0.0025 x 5,000) could be gained or lost on this contract in one day. I should also mention that it is possible that the price on a futures contract can remain unchanged.

The daily price limit determines the boundaries between which the futures contracts can trade for the day and are set by the futures exchanges. These upper and lower price limits are calculated by adding the daily price limit to and subtracting the daily price limit from the previous day’s settlement price. Thus, if wheat closed yesterday at $10 per bushel and there is a daily price limit on wheat of thirty cents per bushel, today’s upper price boundary would be $10.30 and the lower boundary would be $9.70. Also, during the course of the day if the price of the futures contracts for the underlying commodity reaches either of the boundaries, the exchange shuts down trading of all futures contracts for that commodity for the day.

Every day the profits and losses of a futures contract are calculated based on the price movements of the market for that contract in that day. Using the farmer and flour producer example previously mentioned, let's say that wheat futures increased from $10 to $12 per bushel the day after the farmer and flour producer entered their futures contract. The farmer would have lost $2 per bushel, as the selling price has increased from his negotiated price. The farmer's account would be debited $10,000 ($2 per bushel x 5,000 bushels) on the day of the price change. Likewise, the flour producer has made a profit as he is paying less than what the market if required to pay for wheat futures. The flour producer's account would be credited by $10,000. The fact that futures are marked to market or rebalanced daily is what makes futures attractive as there is no credit risk associated in trading futures. If at any time, the current market value causes the trader's margin account to fall below the maintenance margin, a margin call will be made to the futures trader.

On the settlement date of the contract, the holder of the short position (seller) delivers the commodity to the holder of the long position (buyer). If it is a cash-settled future the funds are transferred from the futures trader who incurred the loss to the one who made the profit. In most cases, however, physical delivery of the commodity never takes place. Prior to the delivery day, holders of a futures position are informed that they must close out their position or accept delivery and pay any contract obligations.

So, who participates in this market? Futures traders generally fall into two categories: hedgers and speculators. Hedgers commonly use futures to protect against adverse future price movements in the underlying commodity. Producers and consumers of a commodity, farmers and manufacturers, would fall into this category. Speculators, on the other hand, do not seek to minimize risk but rather to make a profit through the buying and selling of futures contracts. They seek out the very same price risk that hedgers avert.

As the futures market is a centralized marketplace for traders from around the world it provides very important market information. This information is what affects the prices of commodities in the futures market. Factors such as war, supply concerns, weather and deforestation all have a major consequence on the amount of supply and demand, which in turn affects the current and future price of a commodity. For this reason, the futures market has also become a vital economic tool.

While I have outlined some of the basics of the futures market, I should caution that it is not for the faint hearted and should only be entered into if you have a great understanding of the market and how it functions. Speculators entering the futures market should be wary as it is very risky and only funds put aside as risk capital should be invested in this market.

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