

# The *Commitments of Traders* Report

**I**n today's computer-driven world, futures traders have access to hundreds of technical indicators. Most of these indicators, however, share a common origin. The majority are derived from old prices, volume, and open interest. While these indicators have important uses, traders should also understand they have limitations as well.

All price-derived indicators are limited in their ability to anticipate significant future turning points precisely because they are derived from past data. Some indicators that are widely followed, however, will often work well over a short-term period. This may occur because many traders are using them. Thus, acting on them generates a self-fulfilling prophecy over the short-term. In the longer-term however, the market will go where the fundamentals allow it to go, because changing fundamentals drive market participant activity.

Price behavior is a reflection of market participant activity. Thus, another way to track and measure price activity is to track and measure the participant activity. Since the price of a futures contract moves up and down based on the buying and selling by market participants, indicators derived from the participant activity can provide insight into the future direction of price. I characterize these as "leading indicators." A detailed study of the market participant activity can also reveal how specific market participants view market fundamentals. The size of their position and whether they are accumulating or liquidating positions can at times reveal how they perceive future market conditions. The data contained in the

*Commitment of Traders* (COT) report, which is compiled every Tuesday and released every Friday by the Commodity Futures Trading Commission (CFTC), allows traders to track and study the activity of individual market participants in a given futures market. Indicators derived from this information can provide traders with a unique market perspective that is unobtainable through traditional price-derived methods. The lagging characteristics of most price indicators are also a good match with leading COT indicators. A combination of leading and lagging indicators can be extremely helpful in both anticipating major turning points and confirming them.

The CFTC, which oversees all trading activity in U.S. futures markets, requires that all U.S. futures exchange clearing members, futures commission merchants (FCMs), and foreign brokers report daily positions that meet or exceed specific reporting levels, as determined by CFTC regulations (see Table A.1, CFTC Reporting Levels, in the Appendix). The reporting levels vary from market to market, and can change from time to time. On average, the current levels capture roughly 70 to 90 percent of the total open interest in each market.

The CFTC compiles and sorts the data in markets in which 20 or more traders hold positions equal to or above its reporting levels. This data is subsequently sorted by market and released on the CFTC web site (see <http://www.cftc.gov/cftc/cftccotreports.htm>). There are two classifications of the COT report: The first is “futures only” and the second is “futures and options.” Most of the discussions in this book focus on the futures only report.

## **LOOKING AT COT DATA**

---

The COT data, as provided by the CFTC, is broken down by longs and shorts (see Table 1.1). Looking at Table 1.1, you can see a single snapshot of the long and short positions held by commercials, as well as the positions held by noncommercials and those in the nonreportable category.

Although the COT report is readily available, many traders do not understand the data, or do not have the capability or resources needed to fully exploit its potential. One of the reasons for this is that the data is not easy to work with in its raw published form. It is almost impossible, in my opinion, to gain useful insight from the data by simply reviewing the raw numeric changes from week to week. One of the first steps toward making use of the data is to place the data in a graph so that changes can be monitored and examined along with price activity. This allows a trader to observe some of the general relationships between price activity and the COT. However, much more work is required before we can begin to unlock

**TABLE 1.1** COT Data Showing Wheat Futures Positions as of May 3, 2005

WHEAT - CHICAGO BOARD OF TRADE FUTURES ONLY POSITIONS AS OF 05/03/05										
NON-COMMERCIAL						COMMERCIAL		TOTAL		NONREPORTABLE POSITIONS
LONG	SHORT	SPREADS	LONG	SHORT	LONG	SHORT	LONG	SHORT		
(CONTRACTS OF 5,000 BUSHELLS)						OPEN INTEREST:		195,264		
30,927	48,301	8,791	135,815	103,039	175,533	160,131	19,731	35,133		
CHANGES FROM 04/26/05 (CHANGE IN OPEN INTEREST:						-7,243)				
-5,601	609	-548	563	-8,811	-5,586	-8,750	-1,657	1,507		
PERCENT OF OPEN INTEREST FOR EACH CATEGORY OF TRADERS										
15.8	24.7	4.5	69.6	52.8	89.9	82.0	10.1	18.0		
NUMBER OF TRADERS IN EACH CATEGORY (TOTAL TRADERS:						192)				
42	80	29	39	50	106	140				

Source: CFTC.

its full potential. My background in engineering, statistics, and programming has enabled me to create and develop custom statistical studies and charting programs that allow me to examine the COT from every angle. I have developed numerous computer programs and unique trading methods that use a combination of leading COT indicators and lagging price indicators to identify specific market conditions. Many of these methods are discussed in this book. I have also developed a proprietary, automated computer program for analyzing COT data, which is also available on my web site ([www.upperman.com](http://www.upperman.com)).

It is important to understand not only the insights that can be gained from the COT data, but also the ways that this information can be used with other trading indicators to enhance any trading system. As I illustrate through trading examples, the COT data can be used in *any* commodity—agricultural, natural resources, or financial market. For example, analysis of COT data in the financial markets, such as Standard & Poor's 500 (S&P) futures or Nasdaq 100 futures, can enable you to measure and track the level of hedging or speculating taking place in the stock indices. Large shifting of hedged or speculative positions in the futures often leads to sharp rises or declines in the individual stocks that make up the indices. This information can be used to help manage stock portfolios.

When analyzing COT data in any futures market, consistency is paramount—using the same study week after week, with the same parameters, to obtain important knowledge and understanding of the unique behavior of market participants. Because each market is unique, market behavior in

one market may mean something entirely different in another. Thus, within the context of a particular market, the objective is to search for and identify *predictive patterns of behavior*.

The first step is to understand who the market participants are, how they are categorized in the COT report, and how they typically operate in the market.

## COT AND MARKET PARTICIPANTS

---

The COT data, as provided in the weekly report, is essentially a numeric snapshot of all holdings that meet or exceed the specific reporting limits of a particular market. Those positions that do not meet or exceed the specific reporting limits are also in the COT data, but they are not separated by participant type. All positions that meet or exceed the reporting limits in each market are identified and separated by market participant type. There are two distinct types of market participants, and three categories that are tracked in the report. The two types of participants are commercials and noncommercials. The three categories of participants are commercials, noncommercials, and nonreportables. Positions in the nonreportable group are not sorted by type. Understanding how the data is divided is an important first step in developing various ways to exploit and use the information as an aid from a trading standpoint.

The three categories of the COT report are:

1. Large commercial positions (Producer and Consumer Hedgers)
2. Large noncommercial positions (Funds and Large Traders)
3. Nonreported positions (Small Speculators and Small Hedgers)

Of the three, the large commercial category is widely considered to be the most important group. It comprises commercial producers and commercial consumers of a particular commodity. The COT report identifies commercial traders based on two factors: (1) Their position must be large enough to be reported and (2) they must be classified as a *hedger*. This classification is determined when the account is first established—as either *speculative* or *hedging*. This classification also has certain tax benefits or consequences. When opening a hedging account, additional documentation (Forms 102 and 40) may be required by the CFTC to verify a participant is engaged in a business activity hedged by use of the futures or options markets.

Commercial participants are considered the most knowledgeable in each market because their very livelihood depends on their determination

of future prices. Although commercial producers and consumers have different reasons for being in the market, they share a common goal: to reduce their risk in the cash market. For producers, this may mean locking in a particular price using futures contracts to reduce the risk of being forced to sell at lower prices in the cash market. Hence, producers will establish a short position in the futures market to reduce or contain their exposure if cash prices fall. Commercial consumers, on the other hand, are concerned about the possibility of rising raw commodity prices and use futures to contain that risk. Thus, the commercial consumer may buy futures contracts to lock in the future price of whatever commodity it needs.

The noncommercial category represents large trader positions and funds that are large enough to be reported, but are not classified as hedgers. Commercial interest can also be included in the noncommercial category, however, because the category is determined solely by account type. There is no rule that states commercials can open hedging accounts but cannot open speculative accounts. Therefore, it is quite possible (and probable), that some speculative accounts are actually controlled by commercial interests. However, this is likely to be minimal because the tax benefits associated with hedging accounts are an incentive for commercial hedgers to open hedging accounts versus speculative. Most of the time, commercials are going to take advantage of the tax benefits of being classified as a hedger when appropriate (but the CFTC will always have the final say here). Keep in mind that commercials are not required to take advantage of the tax benefits of being classified as a hedger. Furthermore, a large participant could be classified as a commercial hedger in one market and noncommercial in another. Because of these complex issues, it is likely that some level of “cross-contamination” exists between categories. The commercial category, however, widely regarded as the most important category, is likely to contain the least amount of cross-contamination, since it is more difficult to be classified as a hedger and verification is usually required. Thus, I regard the commercial category as the most pure of the three.

## **HEDGERS AND SPECULATORS**

---

An important aspect in understanding commercial hedgers is to realize that they are involved in the underlying cash physicals in some way. There are many ways a market participant or entity can be involved in the underlying cash markets. However, there are basically two types of commercials: commercial producers and commercial consumers. To meet the definition of hedging, a commercial hedger should be taking positions in the futures market that somehow offset their exposure to risk in the physical

commodities, from either a producer or consumer standpoint. In other words, their futures position should not increase their exposure to risk, otherwise they are not hedging. Let's look at some possible examples.

A commercial airliner is a consumer of jet fuel. Rising fuel prices may adversely impact a commercial airliner's business. To offset this risk, the airliner may choose to enter long positions in a fuel market. The airliner should not be in the fuel market selling short, however, because this would simply increase their exposure to the risks of rising fuel prices. To reduce this risk, they should be buying futures contracts to lock in prices. If long fuel contracts and fuel prices rise, the gains in the long positions should offset some or all of the higher fuel prices in the cash market.

A commercial producer, on the other hand, is concerned about falling prices. For example, a grain producer is exposed to the risk of falling grain prices. To manage this risk, the grain producer may elect to sell short grain contracts as a hedge against falling grain prices. The grain producer should not be buying long, however, because this would simply increase their exposure to the risks of falling grain prices. Based on these beliefs, two important assumptions can be made regarding the two types of commercials and the commercial data. Since a commercial producer should always be short to be hedging, we can assume the commercial short positions in the COT data largely represent the commercial producers. Since a commercial consumer should always be long to be hedging, we can assume the commercial longs primarily represent the commercial consumers. These assumptions are not perfect, but they can provide a means for measuring and tracking specific commercial perceptions regarding the future supply and demand in a market. For example, when the net-commercial position is extremely one-sided in a market, this indicates an extreme difference between the number of commercial longs and shorts. Using the assumptions discussed previously, we can examine the data to see which side is leading the net-commercial position higher or lower. If the data shows the commercial longs are at a statistical extreme, while the commercial shorts are inside their normal distribution, we might assume the commercial consumers are the force behind the extreme one-sided position—which is usually bullish. If the data shows that the commercial short position is at a statistical extreme, while the commercial long position is inside its normal range, then we might assume the commercial producers are the force behind the extreme one-sided position, which may be bearish. Examining the data in this fashion can enable a trader to obtain better clarity and specific insight into commercial hedging, which at times may reveal important clues about future supply and demand, which drive prices longer term.

The commercials are also the primary participants in the exercising of futures contracts. If they so choose, the commercial hedgers could make delivery against their short positions and take delivery to settle long posi-

tions, thereby fulfilling their contract obligations. They may also exit out of established futures positions by buying back shorts or selling longs, versus taking or making delivery. Most of the time this is what happens since, in fact, only a few contracts, representing a small percentage of open interest, actually go to delivery. The majority of contracts that trade never go to actual delivery for physical commodities. The commercials often exit their positions, or they may roll them into the next month. They may also allow the contracts to expire because many markets have a cash settlement, requiring no physical delivery of commodities. If the contracts are cash-settled, a commercial hedger holding long positions may also receive the cash settlement in U.S. dollars at expiration.

The noncommercial category is made up of large individual traders and trading funds, which may have positions in one or several markets. In this regard, they are not unlike large mutual funds in the equities markets that generally trade multiple markets. In addition, activity in the noncommercial category includes spread trades among large speculators and funds.

All other open positions that do not fit into the commercial and noncommercial categories fall into the *nonreportable* category (which is often referred to as “small speculators”). It is important to understand that the small speculator category can contain both small commercials and small speculators. All participants holding nonreportable positions share a common trait: The number of contracts held does not meet the reporting limits set by the CFTC for that particular market or commodity.

In this book, as well as in my own trading systems, I focus on the commercial data as being primarily “commercial interest,” and the noncommercial as being composed primarily of “noncommercial interest” (although this category could have some cross-contamination). All the studies I have done on this data show that each category has a unique signature. They tend to move independently of one another, which also suggests and confirms to some extent the purity of the participant groups.

## **Trading Behavior—The Producer**

The standard approach to using COT data has been to focus primarily on the net-commercial position. This approach has been useful, as long as it is used in conjunction with price-based indicators and measures. The analysis of the commercials can also be taken a step further by separating the commercial data into two entities: producers and consumers. The exact commercial details are not provided in the COT report. Therefore, certain assumptions have to be made as already explained. Logically, the assumptions add up nicely. Again, these are the assumptions: There are two kinds of commercials—producers and consumers—and their contrasting activities in the cash markets require opposite tactics in futures trading.

Simply stated, commercial producers produce the commodity. They understand the fundamentals of production very well; they know how much it costs to produce a commodity, and probably know how much money they can get for it too. They also know what their supply is, and they know what market demand is. They may be very good at locking in high prices for their raw product, but they are not perfect; no one is. To hedge, they short futures, with the option of offsetting their positions by delivering against the shorts rather than buying them back. If the commercials are producers of the raw commodity and have established a futures trading account as a hedger, then by law they are required to show that they are involved in the cash market.

Commercial producers of the underlying raw commodity should always be short the futures (opposite of the commercial consumer) when hedging, because this reduces their exposure to the risk of falling commodity prices. By shorting futures, commercial producers can lock in a price for their product.

In the agricultural commodities, it is easy to identify a producer (e.g., an oat farmer or a soybean farmer). But what about the financial markets such as currency futures? A commercial producer of, say, Canadian dollars would be a U.S. corporation that does business in Canada. It produces Canadian dollars as a result of its sales in Canada.

Let's take the hypothetical example of XYZ Corporation, a U.S. company that sells goods and/or services outside the United States. XYZ needs to convert the foreign currency it receives (produces) from its sales into U.S. dollars. For XYZ to control and manage the risk associated with varying exchange rates and the prices of their goods and/or services, XYZ would use the futures market to lock in a predetermined exchange rate. This limits XYZ's exposure to risk due to unforeseen fluctuations in currency rates between the U.S. dollar and the foreign currencies involved.

In this example, XYZ sells goods in Canada and receives Canadian dollars. To limit its exposure to exchange rates, XYZ (being a producer) would sell short a certain number of Canadian dollar futures contracts traded on the Chicago Mercantile Exchange (CME), thereby locking in an exchange rate for the physical Canadian dollars (CD) received. Let's assume XYZ sells short at a price of 6400 (or 64 cents U.S. for every \$1.00 CD). This also equates to \$1.00 U.S. for every \$1.36 CD collected as a direct result of sales in Canada.

With the exchange rate locked in, XYZ Corporation has removed its exposure to risk of changes in the currency market that could adversely affect the corporation's compensation for the goods and services sold in Canada. Moreover, XYZ knows for sure exactly how much it will receive—in U.S. dollars—for its goods and/or services sold in Canada. XYZ likely

would have taken into account the current exchange rate available through futures, which would be used to help determine the pricing of their goods and services in Canada. The prices paid in Canadian dollars would then be converted to U.S. dollars at a predetermined conversion rate, as set by the short sale of Canadian dollar futures.

Subsequent delivery of the agreed payment in Canadian dollars could be used to meet the delivery obligations of the short futures position. At delivery, XYZ would receive U.S. dollars at a rate of \$1.00 for every \$1.3600 delivered in Canadian dollars, based on the entry price of the short sale of futures.

To recap, XYZ essentially produced Canadian dollars in the United States, as a result of its sales in Canada. It used the futures market to hedge currency risk that could negatively impact its bottom line. And, no matter what happens to currency prices, XYZ delivers Canadian dollars at the predetermined exchange rate of \$1.00 U.S. for every \$1.36 CD collected.

### **Trading Behavior—The Consumer**

The commercial consumer consumes the raw commodity. These entities, which may include corporations and large businesses, understand the fundamentals of supply, and therefore they understand price very well. They know how much of the raw commodity they need, how much their competitors need, and what they should be paying for it. They tend to be very good at buying low, but may continue to buy even when prices appear high. This does not mean that they are always bullish. They buy futures to hedge their cash (spot) purchases of the raw commodity.

An example would be an airline that purchases energy futures to hedge its fuel needs out into the future. They may be aggressive buyers in the futures market if they believe that prices are cheap and will rise in the future. They may hedge more aggressively if there is a current supply problem in the cash market, and they need to lock in and secure delivery. (When demand outpaces supply, prices in the front months may become higher than those in the back months. Normally, the back months are higher due to carrying charges.)

If commercial consumers are in dire need of the raw commodity, they will pay virtually any price to get what they need. This is not a position in which any business wants to find itself. Thus, these big consumers manage their purchases well so that they have adequate supply and pay less than retail prices. Thus, it makes sense to monitor their trading activity!

Another example of a commercial consumer is a cereal maker (such as Quaker Oats) that makes and sells oatmeal. To do so, they need the raw commodity, oats. In this case, the commercial consumer hedges against

the risk of rising oat prices by buying oat futures, which are traded on the Chicago Board of Trade. The long position essentially locks in a price for oats, and gives the cereal company the option (but not the obligation) to take delivery at the entry price of the long futures position. Deliveries take place during the delivery period of the contract, which tends to occur after speculators have moved to the next month.

By hedging in the futures market, rising or falling oat prices will no longer affect the cereal company's cost for producing oatmeal. They also avoid any short-term capital gains tax implications because of their hedger classification.

## FUNDS AND SMALL SPECULATORS

---

The two other groups within the COT data are the *funds* and the *small speculator*. They typically buy and sell for the purpose of speculation only. They do not deal in the cash market, but instead use futures to trade, whether with the trend or countertrend. Many funds are major trend followers and trend contributors. The majority of large commodity funds tend to follow the same strategies and benefit from trending markets. They are trend contributors because they maintain and add to their positions as a market trend continues.

The funds speculate in the futures market, taking measured risks, in hopes of making a profit. The commercials, on the other hand, do not solely engage in futures to make a profit (although they do not want to lose money either). Commercials do not profit in the same way a speculator does because of their cash positions. Further, commercials do not necessarily exit all positions in the same way as a speculator. This is where a key difference lies. In addition to the commercial's ability to take or make delivery of the underlying commodity, the commercial may also retain the same amount of hedging by rolling losing positions from one month to the next. Speculators, however, do not tend to roll losing positions. This is important to understand because of its potential impact (or lack thereof) on the market.

Small traders have some advantages in the market. Being small, they can get in and out of positions without being concerned about how the market may react. Large traders, on the other hand, have accumulated a large position in the market (as reported in the noncommercial category of the COT report), and everyone who looks at the COT data knows about it. They can't hide it. Since they are speculative traders, they have to liquidate their positions to realize a profit (if they have one) at some point. Price

slippage during that liquidation process may also cost them much of their profit, given the size of the position.

Large traders and large trading funds are at a disadvantage in this area. Most individual traders are below the CFTC's reportable levels and can get in and out of the market without reporting their positions and without much slippage overall.

## FUNDAMENTAL VERSUS TECHNICAL ANALYSIS

---

As the discussion of the players in the market—the commercials, noncommercials, and nonreportables—shows, much information and insight can be derived from the COT data, once it is dissected and understood, with reasonable assumptions applied. The problem many people have with the COT data is that they try to apply or use it as if it were a traditional price-derived technical indicator. It does not work that way.

*Commitment of traders* data is only useful when combined with other indicators and measures, particularly those that lag the price trend. Most price-derived indicators are lagging and some are sharply lagging. The commercial element of the COT, however, is a *leading indicator*. By combining the two—lagging and leading indicators—a fairly timely market indicator can be obtained.

The majority of traders use technical and fundamental analysis to determine their trades. In general, small, individual traders rely on technical analysis, whereas large commercial institutions tend to focus on fundamentals. The reason for this is clear: Commercial producers and consumers of commodities are in an advantageous position to understand the fundamentals since they are directly involved in the production (supply) or consumption (demand) of a particular commodity.

Small individual traders, who are below the reporting limits of the COT, usually rely on sources such as government reports for their fundamental information. The fundamental information the public receives in these reports usually originates from the commercial producers and consumers. Thus, the trading activity of the commercials—as evidenced in the COT report—is particularly valuable in understanding the underlying fundamentals of a particular market.

For example, by the time a U.S. Department of Agriculture (USDA) report on the supply-and-demand situation in a particular commodity (such as corn, soybeans, etc.) is made public, the large commercials may already be aware of the tone, if not the content. Therefore, they may already be positioned before the report is made public.

Technical analysis, on the other hand, is derived from price data. Since the pool of data is the same, there are inherent similarities in technical systems. In fact, there are seven universal data points (opening price, high price, low price, closing price, net price change, volume, and open interest), from which all popular technical indicators are derived. Although these technical indicators (stochastics, MacD, moving averages, Relative Strength Index, and so forth) are great tools, and I use them as well, they should not be used alone.

Given the popularity and proliferation of technical systems, it is easy to understand why individual traders gravitate toward price-based, technical analysis, as opposed to fundamental analysis. Dozens of popular charting programs are available for individual traders to chart prices and apply popular technical indicators, but very few software programs allow users to chart the fundamentals. Even fewer indicators are derived from fundamental data.

Most speculative traders start out knowing very little about the fundamentals that influence and drive commodity prices. (Their choice to ignore the fundamentals is also a leading reason why they will never see a profit, either.) Fundamentals are crucial to the markets. Although prices may reflect the fundamentals, price behavior alone does not always show the direction of the market. Only the fundamentals can reveal this. The price structure and technical analysis of price data can only provide a view of where the market has been.

Using technical analysis is like looking in the rearview mirror of your car while you are moving forward. Fundamental analysis is the proverbial view out the front windshield at what is ahead. Whereas the analogy is easy to understand, fundamental analysis is not so simple. Each market is unique and has its own set of fundamental influences that are specific to it. (For this reason, I usually recommend that new traders select one market and become an expert in its fundamentals before moving on. Individual traders often become overwhelmed by fundamentals when they attempt to learn the fundamental influences that affect *all* the markets.)

## **BALANCE AND MARKET EQUILIBRIUM**

---

In a perfectly balanced market, supply and demand of a particular commodity would be in equilibrium. Commercial producers' output of a particular commodity would be just enough to meet commercial consumers' demand. Prices would be stable. In the real world, however, the market gets out of balance due to disruptions in supply or demand, and prices become unstable, rising or falling depending on market conditions.

As this price action begins to unfold, speculators come into the market, buying or selling depending on the perceived imbalance, which may cause prices to rise or fall further. Eventually, this activity will help bring the market back into balance, because prices will either rise high enough to generate additional production (thus easing supply shortages), or they will fall far enough to generate additional demand or curtail production.

This ebb and flow in the fundamentals can be seen with careful study of the COT data as it relates the activity over time. Because it reveals what large commercial players—the key producers and consumers in the underlying physical commodity—are doing, it is essential to understanding the dynamics of a particular market.

## USING COT DATA

---

In my study of market participants, I have found that the large moves occur when there are imbalances in supply and demand. The current activity in the market (buying and selling) sets the price. The market tends to discount current conditions and adjust for future conditions. It can be anticipated that the large users and producers of the underlying commodities begin making adjustments to offset perceived changes in supply and demand ahead of time. These adjustments may become evident in the futures market prior to shortages or gluts in supply, as well as before unusual changes in demand.

The large users or producers can often identify deteriorating conditions in the physicals *before* any real deterioration in demand or supply is noted publicly. This lack of public notice is more or less due to a lack of interest at the right time. Why? The public tends to follow rather than lead. By the time the public finally reacts, a good bit of the move in the market has often already occurred.

The public (by way of the media) tends to focus on current events and not on future perceived conditions. The news is always focused on what is occurring *right now*. Today's news, however, isn't going to help anyone identify trends in the futures markets because the large commercial participants in the market are focusing on *future perceived conditions*. In fact, once the actual disruption in supply or demand has occurred and hits the news, commercials may have already adjusted their positions on paper.

Indeed, those paper adjustments need to be closed out to fully offset the initial preparation for whatever the current disruption. Hence, the trading adage: "Buy the rumor, sell the news." The public is usually there, ready to take the other side of the trade, when it is time for the initial adjustments on paper to be closed out by the commercials.

Tools such as COT data, my Upperman Analysis, and IMPA trade setups make it unnecessary to trade based on current news, price activity, or the herd mentality. Instead, by pinning down the action of the market participants, identifying trends, and putting them into historical context, traders can position themselves in front of trends and ahead of the news!