What is a futures contract?

A futures contract is a legally binding agreement to buy or sell a standardized asset on a specific date or during a specific month. Typically, futures contracts are traded electronically on exchanges such as the CME Group, the largest futures exchange in the United States.

How do futures contracts work?

Most futures contracts are "standardized," or effectively interchangeable, and spell out certain specifications, including:

* Quality and quantity of a commodity
* Unit pricing of the asset and minimum price fluctuation (tick size)
* Date and geographic location for physical "delivery" of the underlying asset (but actual delivery rarely happens because most contracts are liquidated before the delivery date)

For example, a December 2022 corn futures contract traded on the CME Group represents 5,000 bushels of the grain (trading in dollars per bushel) to be delivered by a certain date in December 2022. Crude oil futures represent 1,000 barrels of oil and are quoted in dollars and cents per barrel.

Who trades futures contracts and why?

Futures traders are a diverse group. So many different parties and individuals trading futures and providing access can make it easier for all participants to conduct business and trade. The first group of traders are commodity producers and processors, also referred to as "commercials"; they could include oil companies, grain millers, and precious metals miners. There are also "speculators," such as big banks, hedge funds, and individuals who trade for a living, along with retail traders.

The various market participants have their own motivations for buying and selling futures—say, a grain processor who wants to "hedge," or protect, against the prospect of a severe summer drought in the farm states of the U.S. Midwest that could send corn and soybean prices soaring.

Speculators, meanwhile, aim to make money—to "buy low and sell high" (or vice versa). Just like in the equity market, speculators are looking to capitalize on the price fluctuations of the futures contract. They're trying to turn profits on price moves.

Both commercials and speculators are essential to generate the necessary liquidity for the futures market to properly function. They provide a robust number of willing sellers for willing buyers. (A similar principle applies in stock and bond markets.)

What's the history of futures?

Early versions of futures contracts have been traced back to rice markets in Japan in the early 1700s. But futures trading as we know it today began around 1848 when a group of grain merchants established the Chicago Board of Trade (CBOT).

A few years later, the CBOT established the first recorded "forward" contract—a predecessor of the futures contract—based on 3,000 bushels of corn. (The CME Group has since purchased the CBOT and several other exchanges over the past decade.)

Why did futures take root in Chicago? The city's location in the middle of the nation's breadbasket made it a convenient place for buyers and sellers to meet.

The evolution of the futures market began with a need to cover the risks to both sides if the growing season didn't turn out perfectly, according to MarketsWiki, a derivative market database. Buyers, for example, were vulnerable to delivery of substandard or, worse yet, no product at all if the growing season was a bust. They wanted some assurances that the quantity and quality of the commodity they were purchasing would be available when needed.

Farmers needed to know that a glut of available crops across the industry wasn't going to put them out of business.

How do futures exchanges work?

Exchanges provide a central forum for buyers and sellers to gather—at first physically, now electronically. For the first 150 years or so, traders donned colorful jackets, stepped into tiered "pits" on the trading floors, and conducted business by shouting and gesturing, sometimes wildly. Today, so-called open outcry trading has largely been replaced by electronic trading.

Exchanges play another other important role in "guaranteeing" futures contracts will be honored; many exchanges operate "clearinghouses," which serve as backstops or "counterparties" in every trade. The basic idea is to reduce or eliminate counterparty risk and ensure confidence in the markets.

What about the role of margin in futures trading?

In the equity market, buying on margin means borrowing money from a broker to purchase stock—effectively, a loan from the brokerage firm. Margin trading allows investors to buy more stock than they normally could.

Margin works similarly but is different in the futures market. When trading futures, a trader will put down a good faith deposit called the initial margin requirement. The initial margin requirement is also considered a performance bond, which ensures each party (buyer and seller) can meet their obligations of the futures contract. Initial margin requirements vary by product and market volatility and are typically a small percentage of the contract's notional value. This type of leverage carries a high level of risk and is not suitable for all investors. Greater leverage can create much greater losses quickly and with small price movements of the underlying futures contract.

An individual or retail investor who wants to trade futures must typically open an account with a futures commission merchant and post the initial margin requirement, which, in turn, is held at the exchange's clearinghouse.

If prices move against a futures trader's position, that can produce a margin call, which means more funds must be added to the trader's account. If the trader doesn't supply sufficient funds in time, the trader's futures position may be liquidated.

Your downside financial risk is not limited to the amount of equity in your account. Any or all of your positions may be liquidated at any time if your account equity drops below required margin levels.