

EDUCATOR GUIDE

The Futures Marketplace: An Introduction for Educators

Derivatives Defined

A **derivative** is a financial contract between a buyer and a seller that derives its value from an underlying asset or market.

A futures contract

is a type of derivative that allows the user to lock in a price today for a set date of expiration or delivery of a financial instrument or physical commodity in the future. Futures contracts are bought and sold through an organized exchange also known as a <u>derivatives</u> <u>marketplace</u>.

Futures: More Goes into a Bowl of Cereal Than Milk

Imagine you own a farm and that one of your primary crops is corn. Each year you put time, energy, and money into growing your corn in hopes of selling it to make a profit. Some years, due to weather conditions, demand, or other factors, the price at which you can sell your crop is high. Awesome! You make a profit. In other years, however, the price is low, leading to a loss. Price risk—the chance of prices being high or low—is a part of being a farmer.

Across town is a cereal company that produces corn flakes. They, too, experience price risk. The corn needed to make cereal can cost more some years than others. The supply of corn—and its price—impact their production cost as well as their profit potential.

This is where <u>futures contracts</u> come in. As a farmer, you could agree to sell a <u>futures contract</u> and commit to delivering a certain quantity of corn on a specific date at a predetermined price. That specific date might be years into the future, but you would know exactly how much money you'd get from the sale of your harvest—even before you planted your crop. The futures contract helps you reduce the risk of losing money from a significant drop in price.

Similarly, the cereal company could enter a futures contract to buy corn at a specific price and lock in the cost. This assures the company they will have the supply they need and helps the company to manage price risk and—as a result—overall production costs.

Going Beyond Agriculture

While the use of futures contracts dates as far back as the 1600s beginning with the trade of <u>agricultural products</u>, today's <u>derivatives marketplace</u>





goes far beyond the farm. Other commodities like <u>energy</u> and metals, as well as financial products, such as interest rates, foreign currencies, and equity indices are also traded in the derivatives marketplace. Just like with the corn example, futures trading helps business—from global manufacturers, construction, and insurance companies to retirement funds—and individual investors navigate risk and protect themselves against adverse price movements.



What Does Risk Look in the Real World?

A number of outside factors can impact the price of a commodity or financial product, all of which can present a certain level of price risk. Businesses can suffer a loss if the price of their product goes down, while consumers risk the price of everyday necessities like gas and food going up. The cost of everything is largely dependent on the simple balance between two basic <u>principles of economics</u>: supply and demand. What causes a change in supply or demand? Consider these examples.

Weather Drought, storms, freezing temperatures and more can influence the supply of many commodities.	Supply Chain Disruptions to supply chains due to shortages or delays in production and shipping can wreak havoc on both supply and demand.
Policies Laws, regulations, and agreements or disagreements between nations can influence supply and/or demand.	Conflicts Production is limited when there is war or when political trade restrictions (e.g., sanctions and embargoes) are placed on targeted nations. This can dramatically impact physical supply and/or the ability to deliver a commodity like wheat, gas, or heating oil.

How the Futures Marketplace Works

Just like any other market, both buyers and sellers need to come together to make a trade. In a futures marketplace, they come together for one of two reasons: to reduce risk or seek profit. These <u>market</u> <u>participants</u> have specific names:

- **Hedgers** are producers and users of commodities who use the futures market. They trade futures contracts to reduce risks associated with uncertainty and to protect against price fluctuations. Hedgers use futures to lock in a future price for a product so their costs and profits become more predictable.
- **Speculators** are those who assume risks for hedgers in hopes of making a profit from price changes. They have no interest in owning the product being traded. Speculators are vital for the marketplace to function.







Elements of a Futures Exchange

Earlier we talked about the farmer and the cereal company using a derivatives marketplace. But how do these markets function? In the broadest sense, there are four <u>key elements</u> that make a futures exchange work.

1. <u>Futures Traders</u>	2. <u>Trading Technology</u>
Hedgers and speculators come together to ensure	Electronic trading platforms enable exchanges to
a flow of trades (buys and sells) and—in doing so—	operate on a global scale, providing a steady level
bring price transparency and balance to the market.	of speed, access, and transparency for everyone.
3. <u>Clearing</u>	4. <u>Liquidity</u>
Clearinghouses are at the center of every trade.	When every buyer can find a seller, the market
They make sure each side can make good on the	has liquidity and trading can be consistent
terms of the contract and protect the integrity of	and reliable. The more liquidity, the better, and
the market.	speculators add liquidity to a marketplace.

Even Adults Need to Do Their Homework

There's a lot to consider when making a trade in the derivatives marketplace, as trades are financial obligations that have both upside and downside risk (in other words, the potential to make or lose money). In general, the research that is done falls into one of two categories: technical analysis and fundamental analysis.

- <u>Technical analysis</u> uses <u>charts</u>, data, and other tools to identify patterns from past market activity like historical prices and volume to determine the direction of the market.
- <u>Fundamental analysis</u> examines the underlying forces that affect supply and demand such as the price of a commodity like weather, supply, the well-being of the economy, industry groups, and companies, while also considering intrinsic value.

Learn More

<u>Futures Fundamentals</u> provides videos, infographics, and interactive tools that explain the world of futures—and the role they play in the world we live in.

<u>CME Group</u> offers a variety of resources, including self-paced opportunities to deepen your knowledge and improve your understanding of derivatives markets.

<u>The Institute for Financial Markets</u> offers several video lessons (approximately 1–3 minutes in duration) that focus on key economic elements and futures markets.

