

Futures contracts

A futures contract is a standardized contract to purchase or sell an underlying item at a given price by a certain date in the future.

The trading in futures is essentially the same as the trading in stocks. The fees for futures contracts are based on the amount of the contract and the price of the item.

- A futures contract is a standardized form of contract that is clearly recognizable by certain characteristics:
- A futures contract must always have an object or an underlying item.
- A futures contract must also stipulate the amount and units of the underlying item.
- The type of settlement is also always stipulated in the contract and it can be either physical or cash settlement. Physical settlement is a rarity; most futures contracts are settled in cash.
- The currency in which the settlement will be executed must be also always stipulated in a futures contract.
- The delivery month.
- The means of delivery.
- The last trading date must be also stipulated. It is obligatory to settle a futures contract by the last trading date stipulated in the contract.
- An additional item that is stipulated in a futures contract is the minimum permissible price fluctuation.

These characteristics help to ensure the liquidity of a futures contract.

Futures contracts are volatile since the price of the commodities or financial instruments involved in these contracts can vary. As a result futures contracts entail a substantial risk to the investors involved in futures trading.

This is why the trading of futures is tightly regulated. Futures contracts are traded through a futures exchange that acts as the counterparty in futures contracts. The exchange chooses randomly the party that will finally take delivery of the item stipulated in a contract.

Margin

The fact that the exchange always acts as the counterparty in futures contracts and the fact that the price of futures contracts constantly fluctuates, create a substantial credit risk for the exchange. The contract owners, of course, are also liable to the effects of adverse developments in the price of a contract.

To minimize the credit risk involved in each futures contract, the exchange demands collateral from the owners of the contract. This collateral is called initial margin. In the US this is called a performance bond. The initial margin can be lowered or waived for investors who have physical ownership of underlying items subject in a futures contract or for investors who have a balanced position.

Investors must also provide a maintenance margin which is lower than the initial margin and provides the minimum margin that must always be maintained in the investor's account. The maintenance margin is usually 80% of the initial margin.

Margin-to-equity ratio is a term used by investors and represents the ratio between the amount of an investor's capital that is tied to margins at any time and an investor's total capital. This is a key indicator of the health of an investor's portfolio that becomes all the more important because of the known volatility of futures contracts. A conservative trader will typically hold a margin-to-equity ratio in the order of 10 to 15% and an aggressive one will probably hold a margin-to-equity ratio in the order of 40%.

Investors who trade in futures contracts

There two types of investors who trade in futures contracts.

The hedgers who are defensive players and seek to protect themselves from price risk in the commodity or the financial instrument that they hold.

The speculators who seek to gain capital gain on price fluctuations on commodities or financial instruments.

Futures contracts are a useful instrument in the hands of many investors but they are also a risky instrument: there are a number of variables that influence futures contracts. Hence originates the sometimes notorious volatility of futures contracts.

Types of futures contracts

There are two types of futures contracts: the commodity futures and the financial futures.

Commodity futures are the futures contracts that have a given commodity as the underlying item of the contract. Table 1 below shows some examples of commodities futures.

Table 1: Commodities Futures

GRAIN & OILSEEDS	LIVESTOCK & MEAT	FOOD, FIBER & WOOD	METALS & PETROLEUM
Corn	Beef	Potatoes	Gold
Oats	Cattle-Live	Rice	Silver
Soybean	Hogs-Lean	Sugar	Copper

Financial futures are the futures contracts that have a financial instrument as the underlying item of the contract. Table 2 below shows some examples of commodities futures.

Table 2: Financial futures

CURRENCIES	INTEREST RATES	SECURITIES	INDEXES
Canadian Dollar	Federal Funds - 30 Days	Bank CDs	Dow Jones Industrials
Japanese Yen	Treasury Bills	GNMA Passthrough	Municipal Bond Index
Swiss Franc	Treasury Bonds - 30 Years	Stripped Treasuries	NYSE Composite

Calculate the return on a futures contract

The return on a futures contract comes from capital gain; high capital gain is possible due to the volatility of the prices of the commodities or financial instruments that from the underlying items of futures contracts.

You can calculate the return on a futures contract as follows:

$$\frac{\text{Selling Price} - \text{Purchase Price}}{\text{Margin Deposit}}$$

Software and other resources for futures

There are many services that offer information and other resources on futures contracts. In addition there are many software packages that can be used of futures analysis.