
FUTURES CONTRACT INTRODUCTION

The first **futures exchange market** was the Dojima Rice exchange in Japan in the 1730s, to meet the needs of samurai who – being paid in rice and after a series of bad harvests – needed a stable conversion to coin.

The Chicago Board of trade (CBOT) listed the first ever standardized exchange traded forward contracts in 1864, which were called futures contracts. This contract was based on grain trading and started a trend that saw contracts created on a number of different commodities as well as a number of futures exchanges set up in countries around the world.

In Finance, a Futures contract is a standardized contract between two parties to exchange a specified asset of standardized quantity and quality for a price agreed today (the futures price) with delivery occurring at a specified future date, the delivery date. The contracts are traded on a futures exchange. The party agreeing to buy the underlying asset in the future, the “buyer” of the contract, is said to be “long”, and the party agreeing to sell the asset in the future, the “seller” of the contract, is said to be “short”. The terminology reflects the expectations of the parties – the buyer hopes or expects that the asset

price is going to increase, while the seller hopes or expects that it will decrease.

In many cases, the underlying asset to a futures contract may not be traditional commodities at all – that is, for financial futures the underlying asset or item can be currencies, securities or financial instruments and intangible assets or referenced items such as stock indexes and interest rates.

While the futures contract specifies a trade taking place in the future, the purpose of the futures exchange institution is to act as intermediary and minimize the risk of default by either party. Thus the exchange requires both parties to put up an initial amount of cash, the margin. Additionally, since the futures price will generally change daily, the difference in the prior agreed-upon price and the daily futures price is settled daily also. The exchange will draw money out of one party's margin account and put it into the others so each party has the appropriate daily loss or profit. If the margin account goes below a certain value, then a margin call is made and the account owner must replenish the margin account. This process is known as marking to market. Thus on the delivery date, the amount exchanged is not the specified price on the contract but the spot value (since any gain or loss has already been previously settled by marking to market).

STANDARDIZATION

Futures contracts ensure their liquidity by being highly standardized, usually by specifying:

- The underlying asset or instrument. This could be anything from a barrel of crude oil to a short term interest rate.
- The type of settlement, either cash settlement or physical delivery.
- The amount and units of the underlying asset per contract. This can be the notional amount of bonds, a fixed number of barrels of oil, units of foreign currency, the notional amount of the deposit over which the short term interest rate is traded, etc...
- The currency in which the futures contract is quoted.
- The grade of the deliverable. In case of bonds, this specifies which bonds can be delivered. In case of physical commodities, this specifies not only the quality of the underlying goods but also the manner and location of delivery. For example, the NYMEX Light Sweet Crude Oil contract specifies the acceptable sulphur content and API specific gravity, as well as the pricing point – the location where delivery must be made.
- The delivery month.

- The last trading date.
- The commodity tick.
- The maximum permissible price fluctuation.

Margin

To minimize credit risk to the exchange, traders must post a margin or a performance bond, typically 5%-15% of the contract's value. To minimize counterparty risk to traders, trades executed on regulated exchanges are guaranteed by a clearing house. The clearing house becomes the buyer to each seller, and the seller to each buyer, so that in the event of a counterparty default the clearer assumes the risk of loss. This enables traders to transact without performing due diligence on their counterparty.

Margin requirements are waived or reduced in some cases for hedgers who have physical ownership of the covered commodity or spread traders who have offset contracts balancing the position.

Clearing margin are financial safeguards to ensure that companies or corporations perform on their customers' open futures and options contracts. Clearing margins are distinct from customer margins that individual buyers and sellers of futures contracts are required to deposit with brokers.

Customer margin within the futures industry, financial guarantees required of both buyers and sellers of futures contracts to ensure fulfillment of contract obligations. Futures Commission Merchants are responsible for overseeing customer margin accounts. Margins are determined on the basis of market risk and contract value.

Initial margin is the equity required to initiate a futures position. This is a type of performance bond. The maximum exposure is not limited to the amount of the initial margin, however the initial margin requirement is calculated based on the maximum estimated change in contract value within a trading day. Initial margin is set by the exchange.

If a position involves an exchange-traded product, the amount or percentage of initial margin is set by the exchange concerned.

In case of loss or if the value of the initial margin is being eroded the broker will make a margin call in order to restore the amount of initial margin available. Often referred to as “variation margin”, margin called for this reason is usually done on a daily basis, however, in times of high volatility a broker can make a margin call or calls intraday.

Calls for margin are usually expected to be paid and received on the same day. If not, the broker has the right to close sufficient positions to

meet the amount called by way of margin. After the position is closed-out the client is liable for any resulting deficit in the client’s account.

A futures account is marked to market daily. If the margin drops below the margin maintenance requirement established by the exchange listing the futures, a margin call will be issued to bring the account back up to the required level.

Maintenance margin set a minimum margin per outstanding futures contract that a customer must maintain in his margin account.

Margin-equity ratio is a term used by speculators, representing the amount of their trading capital that is being held as margin at any particular time. The low margin requirements of futures results in substantial leverage of investment. However, the exchanges require a minimum amount that varies depending on the contract and the trader. The broker may set the requirement higher, but may not set it lower. A trader of course, can set it above that, if he does not want to be subject to margin calls.

SETTLEMENT – PHYSICAL VERSUS CASH-SETTLED FUTURES

Settlement is the act of consummating the contract, and can be done in one of two ways, as specified per type of futures contract:

- **Physical delivery** – the amount specified of the underlying asset of the contract is delivered by the seller of the contract to the exchange, and by the exchange to the buyers of the contract. Physical delivery is common with commodities and bonds. In practice, it occurs only on a minority of contracts. Most are cancelled out by purchasing a covering position.
- **Cash settlement** – a cash payment is made based on the underlying reference rate, such as short term interest rate index such as Euribor, or the closing value of a stock market index. The parties settle by paying/receiving the loss/gain related to the contract in cash when the contract expires. Cash settled futures are those that, as a practical matter, could not be settled by delivery of the referenced item – i.e. how would one deliver an index?

Expiry is the time and the day that a particular delivery month of a futures contract stops trading, as well as the final settlement price for that contract. For many equity index and interest rate futures contracts, this happens on the third Friday of certain trading months.

Contango and backwardation

The situation where the price of a commodity for future delivery is higher than the spot price, or where a far future delivery price is higher than a nearer future delivery, is known as contango. The reverse, where the price of a commodity for future delivery is lower than the spot price, or where a far future delivery price is lower than a nearer future delivery, is known as backwardation.

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