www.deutsche-boerse.com/up-to-date

Derivatives
Protection against price and rate fluctuations

What is a derivative?

The word “derivative” comes from the Latin “derivare”, meaning “to draw off from”. A derivative is therefore a financial product whose price performance is derived from that of another financial product, termed the underlying product. An underlying may be another security such as a share or a bond. Thus, derivatives are indirect investments whose value depends on the product underlying them.

Derivatives trading can be used both for speculation and for risk hedging, e.g. against rate fluctuations. There are therefore a multitude of derivatives on a wide range of underlyings.

Derivatives can have different underlying assets

Derivatives may be structured as futures, options or swaps.

A **future** is a standardised, exchange-traded contract (futures contract) where buyer and seller undertake to deliver or purchase a particular quantity of an underlying of a specific quality at maturity at a specified price. A distinction is made between commodity futures (futures contracts on commodities) and financial futures (futures contracts on shares, bonds, indices and currencies).

With an **option**, the buyer has the right (but not the obligation), for a limited period of time, to accept a contractual offer. The contractual offer specifies the price and quantity of the commodity being offered. A “call” gives the right to buy the commodity at a particular price, and a “put” the right to sell a particular commodity at a predetermined price. The decision to exercise the option is solely that of the buyer. If the buyer does not use their right to exercise the option before maturity, the option expires worthless. Investors use options primarily to hedge against price fluctuations or bet on the direction of a price.

A **swap** is an agreement for an exchange between two parties. Swaps are usually traded off-exchange (over the counter, OTC), as they are non-standardised contracts that have to be negotiated individually. Their main function is to hedge obligations: if, for example, a borrower with a variable interest rate expects a rise in the rate, they can therefore hedge against that rise by swapping the variable rate for a fixed rate. However, swaps also provide the opportunity to gain a comparative advantage: if, for example, it is easier for a company to raise a loan on terms contrary to its business interests, it can switch the terms of the loan at a later date by swapping it for a loan with a comparative advantage.

Why trade in derivatives?

A shareholder can use an option or a future on that share to hedge against changes in price. If the price of a share falls, for example, the investor is hedged against the fall in the price of that share. So, a derivative is a kind of financial protection. It is a financial instrument whose price and performance are determined by the fluctuations in or price expectations for other investments.

Due to their complexity, derivatives are traded by professional investors, who use them primarily as a precautionary measure against the sharp fluctuations in the price of shares and interest rate products on the financial markets. Companies, investment and pension funds, and the public sector also use derivatives as a (long-term) hedge instrument against the risk of interest and exchange rate fluctuations.

Eurex Exchange – an exchange for the better

Via Eurex Frankfurt AG, Deutsche Börse operates the Eurex Exchange derivatives market – one of the largest exchange organisations worldwide. Eurex Exchange is now Europe's largest venue for futures trading and offers a wide range of standardised options and futures. With market participants from 700 locations worldwide and trading volumes in excess of 1.7 billion contracts a year, Eurex Exchange is one of the preferred marketplaces for the global derivatives community.

Deutsche Börse Group – we make markets work

Deutsche Börse Group is one of the largest exchange organisations worldwide. It operates markets that provide integrity, transparency and security for investors wishing to invest capital and for companies wishing to raise capital. On these markets, institutional traders buy and sell shares, derivatives and other financial instruments in accordance with clear rules and under strict supervision.

Deutsche Börse Group is now more than just a trading venue or exchange – it is a provider of financial market infrastructure. Its products and services span the entire finance value chain – its business areas range from pre-IPO services and the admission of securities, through trading, clearing, settlement and custody of securities and other financial instruments to collateral management. It also offers IT services, indices and market data worldwide.

Published by

Deutsche Börse AG
60485 Frankfurt/Main
Germany

August 2019

Contact

Group Regulatory Strategy
E-mail regulatory.strategy@deutsche-boerse.com