INVESTOPEDIA

INVESTING > OPTIONS

Quadruple Witching

REVIEWED BY JAMES CHEN | Updated Jul 24, 2018

DEFINITION of Quadruple Witching

Quadruple witching refers to a date that entails the simultaneous expiry of stock index futures, stock index options, stock options & single stock futures. While stock options contracts and index options expire on the third Friday of every month, all four asset classes expire simultaneously on the third Friday of March, June, September and December. Much of the action surrounding futures and options on quadruple witching days is focused on offsetting, closing or rolling out positions, as well as arbitrage trades, with the result being elevated volume, particularly in the last hour of trading.

Quadruple witching is similar to the triple witching dates, when three out of the four asset classes expire at the same time, or double witching, where involves just two.

Quadruple Witching

BREAKING DOWN Quadruple Witching

Quadruple witching replaced triple witching days when single stock futures started trading in November 2002. Despite the expiration of four contract types, the terms "triple witching" and "quadruple witching" are often used interchangeably. One of the primary reasons for the heavy volume on these expiration days is that trades on underlying securities are automatically executed on options expiring in the money and expiring futures contracts. Under certain circumstances, positions are opened for the purpose of executing these trades, but derivative-based traders seeking to avoid principal-based transactions must take action to prevent open positions in their portfolios from expiring.

In-the-Money Options

Call options expire in the money when the price of the underlying security is higher than the strike price in the contract. Put options are in the money when the stock or index is priced below the strike price. In both situations, the expiration of in-the-money options results in automatic transactions between the buyers and sellers of the contracts.

With call options, which are usually written on stock held in the writer’s portfolio, the shares are automatically called away at the strike price to be purchased by the buyer of the contract. The seller of a put contract that expires in the money is automatically assigned shares to buy at the strike price. In both types of contracts, traders can close positions prior to expiration to avoid automatic assignments and executions.