

## **Market Dynamics**

Now that we have a better idea about how the exchange works and the role market makers play, let's move on to talk about dynamics between these players and the two main "buy side" groups – individual investors and institutions like hedge funds.

I use the term "hedge fund" in this presentation, but other institutional investors like insurance companies and pension funds also participate in the way I'm describing.

The relationship of market makers to the exchange is very tight; the market maker posts bid and ask prices on the exchange in the way we described in the last lesson and can see the orders placed by all other investors as well.

The market maker serves as the main conduit of individual and institutional investors to the exchange, taking their orders, filling them or passing them through to the exchange and sending back information about transaction prices to investors.

The last 15-20 years has seen rapid growth in the sophistication of private high-frequency trading firms, first in stocks and increasingly in options. HFT firms are enabled by exchange members offering 'direct market access' platforms. Direct market access allows order messages to travel very quickly from HFT algorithms to the exchange and trade notifications to flow back again on a timescale measured in milliseconds. As you saw in the last few lessons, HFT firms are the bane of market makers' existence.

As we mentioned in our Introduction to Options mini-course, off the exchange, there is a thriving market of so-called "Listed Look-Alike" options that are transacted between market makers and hedge funds or other institutional investors.

Both the listed market and the OTC can be very handy from a hedge fund manager's perspective...

## Vocabulary

**Axe**: Broker jargon meaning a position in a derivative contract that needs to be hedged with an offsetting position. If a broker has an axe in a security, an institutional buy side investor can often take the opposite side of that trade at an advantageous price.

**Buy Side**: Financial market participants, unaffiliated with exchanges, that invest their own capital or on behalf of owners of capital. Examples: private investors, mutual funds, hedge funds, insurance companies.

**Cash Market**: (Mentioned in the presentation but not in the transcript.) The market for non-derivative securities. The stock market in the case of stocks. The opposite of "derivatives market."

**Direct Market Access**: A services whereby exchange members provide clients a direct link to exchange order and transaction data. DMA facilities enable the growth and flourishing of high-frequency trading.

**Hedge**: To fully or partially neutralize economic exposure to fluctuations in price of an asset.

**Hedge Fund**: A private investment partnership that is structured in the US to serve only the needs of high net worth and institutional clients.