

Lecture 1: The Options Market and Options Trading

Before you trade options, it is essential that you have a good working knowledge of how to evaluate stocks and the underlying factors that influence share prices. Stock options convey the right to either acquire or sell stock over a particular period of time for a specific price and so, you need to really know a lot about the stock you are interested in buying or selling an option in to be successful.

3 Main Advantages of Trading Stock Options

[1] Income: Options can be used quite effectively to generate income or cash flow. You can sell options on stocks you already own to generate additional income to your stock portfolio. In a way you are renting stocks to other people and they are paying you for the privilege.

[2] Insurance: If you have a large position in one stock and prefer to reduce risk exposure, you can use options to insure or hedge against price declines in that stock. You can also buy stock options to lock in the price of a stock that you want to be able to purchase later at its attractive price today.

[3] Speculation: With very little up-front money you can leverage your investments to make many times more than you put into the purchase of a stock. The use of options may limit your downside risk to the option premium paid to acquire a right to buy or sell a stock. In other words, you know in advance how much you could lose with this option strategy.

2 Disadvantages of Trading Stock Options

[1] Options by their very nature are time contracts which means that with some strategies you will need to be able to accurately assess how a stock performs over a 30,60,90 day period or in one or two years.

[2] Options provide a reward if the underlying stock performs in the direction predicted by its owner. With some stock options, the direction of the stock move will have to reach some pre-determined level in order to generate value to the holder.

So, with stock options, you need to be able to successfully evaluate the direction and timing of the movement of a stock's price to generate a return.

One sequence of the 2008 Financial Market Meltdown, the collapse of Long Term Capital Management, and the Freddie Mac/Fannie Mae losses from CMO's is that the more complex a trading strategy [i.e., the more variables for determining gain] the greater the opportunity to lose money. You should stick

with those simple strategies you understand and feel comfortable with [i.e., getting a good night's sleep].

A Simple Example of Buying an Option --- the House Refinancing Decision

You currently have a \$200,000 5.25% 30-year mortgage on a house appraised at \$275,000. Mortgage interest rates have declined since 2008, and so, you can now refinance your outstanding loan balance for 3.125% on a 15-year fixed rate mortgage. However, it will take 30 days to complete the necessary paperwork to reach closing. You are given the opportunity of locking in the low 3.125% rate today, by paying the origination bank \$500. In this case you are buying an option for \$500 to purchase a 3.125% \$200,000 mortgage over the next 30 days. The option premium is \$500. Under what circumstances does this option become more valuable? Under what circumstances does this option become less valuable?

There are 2 parties to a stock option --- these two parties are polar opposites in a zero-sum game. The buyer of an option is in control of when a stock is bought or sold.

A Brief History of Stock Options

Eighteenth Century: The first option market in the US began in 1791 when the NYSE opened. Because options were not considered part of the regular market, transactions were arranged in an "over-the-counter" market. There was no central place that buyers and sellers could meet to trade options. One of the ways buyers and sellers would meet was through newspaper ads placed by firms who had options they wanted to buy or sell.

Nineteenth Century: By the early 1900's, stock options were traded through over-the-counter dealers known as the Put and Call Brokers and Dealers Association. During this period it was easy to lose money on bad deals, because no one guaranteed the options contract, and traders were on their own. It was until the development of the Chicago Board of Trade and the Chicago Mercantile Exchange that options contracts became much more predictable in terms of performance due to the work of the Clearing Corporation.

Opening an Options Account

5 Steps:

[1] Open a brokerage account and then secure option trading authority. The brokerage will determine how much money in stock and cash you will need in order to be able to trade options [at least a minimum of \$2,500]. Because you can now trade options over the internet the transactions costs have dropped significantly - in some cases one leg of a trade could be as low as \$10. Each brokerage will have its own set of charges so you need to check the cost for the types of trading strategies you are going to choose before opening an account. In addition to cost of trades, you also need to consider whether the brokerage provides option trading tools and research which can be a plus. Also, some brokerages will provide option representatives who are available to answer questions which may be useful.

[2] Sign the Margin Agreement – If you are buying money from a broker to purchase stocks, you are “buying on margin” and need to open a margin account attached to your brokerage account. When you purchase securities on a margin designated account, you will need to indicate for each trade whether you wish to pay or receive cash on margin or on a cash basis. If you open a margin account, the brokerage firm will run a credit check to make sure you have the financial resources and knowledge to handle margin. Margin is similar to a credit card. You don’t have to use it, but you can access the value of your equity positions to leverage stock or stock option purchases. A lot of investors don’t realize that by signing a margin agreement, they are allowing the brokerage firm to lend their stocks to others. Because one can get into a lot of trouble fast using margin, it is best to limit the amount of margin in your portfolio to no more than 10 to 15% of the entire value of all your positions. Margin agreements are not usually allowed on tax advantaged, retirement accounts – Roth/Traditional IRA, SEP, or 401K/403B retirement plans. However, some firms allow it – since you can not use losses in these retirement accounts it is not recommended that you use margin in them. More importantly, you can trade basic stock options in a retirement account and there are reasons why you might do so within the context of either providing income or insurance to the portfolio.

[3] Sign an Options Agreement with the Brokerage –the broker wants to determine whether you have the knowledge, experience and financial resources to trade in options. If you have never traded in stock options you will only be approved for Level 1 or Level 2 options categories. However, if you are seeking to use stock options either to enhance portfolio income or purchase insurance related to a stock position, these two categories will fulfill your needs initially. Some investors may never need trading authority above the 2 level.

Options Levels:

Level 1 – Selling Covered Calls or writing a stock option

Level 2 - Buying Calls and Puts

Level 3 - Straddles, Spreads and Strangle

Level 4 - Selling Naked Puts and Calls

Level 5 - Selling Naked Indexes

You will need to sign and date your agreement, however, before doing so you should read the contract to understand what you are getting into.

[4] The Brochure – every brokerage firm is required to give a copy of a technical pamphlet entitled, Characteristics and Risks of Standardized Options, to a prospective options investor. This brochure is your options disclosure document.

[5] The Standardized Options Contract – all options contracts are standardized such that the terms of the option are the same for all investors. In the early days of option trading, contracts were customized to meet the needs of the parties entering into each agreement. There was no clearing corporation that guaranteed performance and so investors lost money when parties failed to fulfill on their agreements. However, today options are a legally binding agreement and the clearing corporation stands between both parties to the contract making sure the terms are fulfilled.

Options History Supporting the Need for Contract Standardization and Performance Guarantees

1635 – Dutch Tulip Bulb Bubble and Market Collapse

In Holland during the 17th Century, a market was developed on the basis of trading tulip bulbs. In short order bulbs became valuable not on the basis of their intrinsic value, but what investors would pay for them. The bulbs became prized as a status symbol, so prices went sky high with one exotic bulb selling for as much as \$200,000 in today's dollars. In an effort to increase the value of the bulbs, speculators sold options on them to allow those who could not afford to participate in the regular spot market to speculate in options. As the option prices rose, speculators would turn around and sell them for a profit. Consequently, some speculators made a profit without ever taking delivery of the bulbs. Some speculators bought put options [called time bargains], as a hedge against a drop in the price of bulbs. The prices for bulbs skyrocketed partly due to lack of supply initially, followed by unrealistic demand that was enhanced by the options. However, eventually when supply caught up with demand -- the prices started to go down and the price deterioration accelerated --- towards the end the Dutch government step in an offered to pay 10% of what owners had paid for the bulbs but it was too late. The crash in the spot market spilled over into the options market and so contracts went unfulfilled. Family fortunes were lost, some blamed options for the market collapse, and so in some European countries options were banned for many years.

1900-1929 United States Stock Market

Similar to some of the strategies showcased in the book FIASCO, during this period stockbrokers would tout undesirable stocks to their clients and in return receive options on those stocks. As the brokers sold more of the stocks in these worthless companies, the value of the stock would go up which thereby drove up the price of the options held by the brokers. After the options reached a high enough price, the brokers would unload the options at a profit [which was really an early version of the “pump and dump strategy” that became famous in the 1980's and 90's]. During this same period, major shareholders in a company would create “option pools” that would allow them to manipulate share prices in the firms they held shares in. The result was that stock prices were subject to moving up or down based on rumors about the actions of these option pools. In 1929, when the US stock market collapsed the prevailing thought was that options contributed to its meteoric rise and fall. In the subsequent Congressional investigation of options in the 1930, Herbert Filer, a well-known, experienced

options trader testified that options were similar to insurance contracts designed to protect against market volatility. Although most options were worthless when they expired, buying options was much the same as paying an insurance premium against the loss of your home due to fire. Congress agreed with this argument and agreed that not all options trading were manipulated transactions. The Investment Act of 1934 legalized options and in 1935 the SEC granted the CBOT a license to register the options market as a securities exchange. Ironically, the CBOT did not actually take advantage of this license and register as an options exchange until 1968 – the date when standardized options entered the US financial market.