Get a Plan! How an options trading plan can help avoid large losses

Trading Strategy Desk
Disclosures

Options trading entails significant risk and is not appropriate for all investors. Certain complex options strategies carry additional risk. Before trading options, please read Characteristics and Risks of Standardized Options, and call 800-544-5115 to be approved for options trading. Supporting documentation for any claims, if applicable, will be furnished upon request.

Examples in this presentation do not include transaction costs (commissions, margin interest, fees) or tax implications, but they should be considered prior to entering into any transactions.

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Goals of Today’s Webinar

The focus of today’s webinar is to show investors how having a plan for trading can assist in the decision making process. We will walk through examples of trades and review how to analyze, define your exit strategy, and manage the position along the way.

- Why a trading plan is needed
- How to create a plan
- Managing your trade when your outlook has changed
- Common pitfalls traders make
The Trading Process

How will a plan help improve my trading?

Many traders tend to focus on the profits a trade may bring at the start without fully understanding the risk of an incorrect assumption.

Having a plan can assist with taking away the emotional attachment to a trade by clearly defining when to exit a trade that isn’t working.

Trading Scenario: A trader thought XYZ stock was in line for a big jump on earnings. He fully leveraged his margin account to buy as many shares as he could. The stock fell 10% on the earnings announcement. The trader, now believing the stock would rebound, continued to hold. A week later the stock was down over 40%.
The Trading Process

Risk Management

- While considering a trade, focus on the overall risk first and profit potential second
- When a trade goes against you, the focus should shift to managing the trade under the current conditions rather than the initial prediction

Trading Discipline

- Take steps to reduce emotional attachment
- Try not to think only in terms of gains/losses
- Trade what you see and not what you think
Creating a Plan

- There are various forms of analysis that traders use to determine an outlook on direction. Some of the more common methods of analysis include fundamental, technical, or even combination of both.

- Use your analysis to define your outlook.
  - Start with your outlook on direction whether it’s bullish, bearish, or neutral
  - For options trades time and volatility assumptions also need to be made

- The strategy should be selected to match your outlook
Creating a Plan

Before placing a trade you should be able answer

✓ Why you are entering this position?
✓ How much capital you are willing to allocate to any idea?
✓ What is the criteria for entry (at what price)?
✓ What is the criteria for exiting (for both the upside and downside)?
Defining an Outlook with Technical Analysis

A common signal traders use in technical analysis is the moving average crossover. When a faster moving average crosses above a slower moving average it creates a bullish signal. When the faster moving average falls below the slower it is considered a bearish signal. We will walk through the steps of creating and managing a plan using technical analysis.

The highlighted area is where the faster 50 day moving average crosses above the slower 200 day moving average.

Outlook is bullish.

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Technical analysis focuses on market action — specifically, volume and price. Technical analysis is only one approach to analyzing stocks. When considering which stocks to buy or sell, you should use the approach that you're most comfortable with. As with all your investments, you must make your own determination as to whether an investment in any particular security or securities is right for you based on your investment objectives, risk tolerance, and financial situation. Past performance is no guarantee of future results.
Determining Entry and Exit Points

The *entry point* is created through moving average crossover at approximately $63. For the *exit* we also want to focus on the moving average crossover, remember the signal generates for the sell when the faster moving average crosses back below the slower. A *downside exit point* is critical to managing the trade should your initial signal fail. In the chart below you will see two red support lines that could be used when considering a lower exit. Some traders will also use a set percent stop or trailing stop amount.

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What’s the Plan?

➤ **Outlook**: Bullish. Determined by technical analysis.

➤ **Entry point**: $63. Determined by using the 50 and 200 day moving average crossover (Golden Cross)

➤ **Exit point (upside)**: 50 and 200 day moving average crossover (Death cross)

➤ **Exit point (downside)**: 10% trailing stop loss

*Trading Pitfalls*: Many traders lose track of the plan they had in place as time goes by. Take note of your trading plan on the Fidelity Notebook tool to help you maintain discipline.
Managing the Trade

- Entry point: 3/11/15 at approximately $63
- Exit point (downside): 10% trailing stop loss triggered on 7/28/15 at 106.10. *Stop loss orders automatically become a market order when the stop price is reached. Therefore, there is no guarantee that your order will be executed at the stop price.*
- Exit point (Death Cross): 2/22/16 at approximately $91

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Defining an Outlook for an Options Trade

When trading options we can not focus on price alone as there are other components that affect the options price.

- **Direction:** Determine whether you are bullish, bearish, or neutral on the underlying stock through your analysis. The Greek Delta tells us how much an option price will change given a $1 change in the underlying price.

- **Time:** Unlike owning stock, each option contract has a finite lifetime. So for each day that goes by the option price loses a portion of its time value, all else being equal. This is a benefit for options sellers and a drawback for the options buyers. This can be measured using the Greek Theta.

- **Volatility:** Implied volatility is an important component in determining whether an option is considered cheap or expensive. Increasing volatility increases options premium all else being equal which is a benefit to options buyers and a negative for options sellers. This is measured using the Greek Vega.
Defining an Outlook for an Options Trade

**Direction: Bullish.** The stock is currently at a resistance level and the price is above the 50 and 200 day moving averages. The trade plan is based on the price breaking through resistance and rising into next months earnings.

**Time:** This is an earnings trade with the earnings date on May 17th. We will look for the first expiration date after earnings which is May 20th.

**Volatility:** The current level of implied volatility (IV) in this example is 16.6 which is in the 10th percentile. The past 2 quarters the IV has risen into earnings and fell after the announcement. Although the past does not guarantee a future result, we can use this pattern to form our outlook on IV which we'll assume will increase into earnings and begin to revert back down after.
Finding the Right Strategy

How would various options strategies fare if the assumption (increase in price and IV) was correct?

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Impact from Price</th>
<th>Impact from Time</th>
<th>Impact from Volatility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Call</td>
<td>Benefits from increase in price.</td>
<td>Loses value from time decay</td>
<td>Benefits from increase in IV</td>
</tr>
<tr>
<td>Short put</td>
<td>Benefits from increase in price.</td>
<td>Benefits from the loss of time decay</td>
<td>Loses from increase in IV</td>
</tr>
</tbody>
</table>

Trading Pitfalls: Many traders fall into the habit of sticking to only one strategy and letting that strategy define your outlook. Let your outlook on the underlying define the strategy you are implementing.
What’s the Plan?

In the following examples we will compare both strategies at two different strike selections

Current Price

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Qty</th>
<th>Bid</th>
<th>Ask</th>
<th>Theo Price</th>
<th>IV</th>
<th>Delta</th>
<th>Theta</th>
<th>Vega</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 20 2016 130 Call</td>
<td>1</td>
<td>6.75</td>
<td>6.85</td>
<td>6.85</td>
<td>22.27</td>
<td>68.731</td>
<td>-4.234</td>
<td>16.733</td>
</tr>
<tr>
<td>May 20 2016 140 Call</td>
<td>1</td>
<td>1.41</td>
<td>1.46</td>
<td>1.46</td>
<td>18.25</td>
<td>28.218</td>
<td>-3.278</td>
<td>15.966</td>
</tr>
</tbody>
</table>

For the long call strategy we review an ITM 130 call and an OTM 140 call. The two biggest differences between the two are in the price per contract and delta.

Short Put

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Qty</th>
<th>Bid</th>
<th>Ask</th>
<th>Theo Price</th>
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<th>Delta</th>
<th>Theta</th>
<th>Vega</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 20 2016 130 Put</td>
<td>-1</td>
<td>2.10</td>
<td>2.16</td>
<td>2.13</td>
<td>21.78</td>
<td>30.943</td>
<td>3.982</td>
<td>-16.658</td>
</tr>
</tbody>
</table>

For the short put strategy we will review an ATM and an OTM put. You will also notice the differences between the two in price and delta.

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Managing the Trade

Using Fidelity’s Profit/Loss Calculator we can model our assumptions to see the impact of changes in price, time, and volatility.

<table>
<thead>
<tr>
<th>Price</th>
<th>Date</th>
<th>IV Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>140</td>
<td>05/16/2016</td>
<td>30</td>
</tr>
</tbody>
</table>

**Price increases** | **Time passes** | **Volatility increases**

Long call

The 130 call increased by $3.10 or 46.5% while the 140 call increased by $.051 or 35% Both have benefited from the increase in Price and IV.

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Qty</th>
<th>Bid</th>
<th>Ask</th>
<th>Theo Price</th>
<th>IV</th>
<th>Delta</th>
<th>Theta</th>
<th>Vega</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 20 2016 130 Call</td>
<td>1</td>
<td>6.75</td>
<td>6.85</td>
<td>10.04</td>
<td>30.00</td>
<td>98.339</td>
<td>-2.171</td>
<td>0.676</td>
</tr>
<tr>
<td>May 20 2016 140 Call</td>
<td>1</td>
<td>1.41</td>
<td>1.46</td>
<td>1.97</td>
<td>30.00</td>
<td>50.762</td>
<td>-19.684</td>
<td>6.535</td>
</tr>
</tbody>
</table>

Short Put

The 130 put decreased by $2.07 or 99% while the 135 put decreased by $3.48 or 90%. Both have benefited from the increase in price and passage of time

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Qty</th>
<th>Bid</th>
<th>Ask</th>
<th>Theo Price</th>
<th>IV</th>
<th>Delta</th>
<th>Theta</th>
<th>Vega</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 20 2016 130 Put</td>
<td>-1</td>
<td>2.10</td>
<td>2.16</td>
<td>0.03</td>
<td>30.00</td>
<td>1.66</td>
<td>2.027</td>
<td>-0.677</td>
</tr>
<tr>
<td>May 20 2016 135 Put</td>
<td>-1</td>
<td>3.85</td>
<td>3.95</td>
<td>0.37</td>
<td>30.00</td>
<td>14.573</td>
<td>11.219</td>
<td>-3.748</td>
</tr>
</tbody>
</table>

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With earnings being the next day, the trader now needs to decide whether to take profits now or to formulate a new assumption on price and volatility.
Managing the Trade

Price is flat  Time passes  Volatility increases

Long Call

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Qty</th>
<th>Bid</th>
<th>Ask</th>
<th>Theo Price</th>
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<th>Delta</th>
<th>Theta</th>
<th>Vega</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 20 2016 130 Call</td>
<td>1</td>
<td>6.75</td>
<td>6.85</td>
<td>4.98</td>
<td>30.00</td>
<td>84.261</td>
<td>-11.494</td>
<td>3.791</td>
</tr>
<tr>
<td>May 20 2016 140 Call</td>
<td>1</td>
<td>1.41</td>
<td>1.46</td>
<td>0.32</td>
<td>30.00</td>
<td>13.448</td>
<td>-10.254</td>
<td>3.411</td>
</tr>
</tbody>
</table>

Although the price hasn’t changed the 130 call decreased by $1.87 or 27% while the 140 call decreased by $1.14 or 78%. The increase in volatility was not enough to make up for the loss from time decay.

Short Put

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Qty</th>
<th>Bid</th>
<th>Ask</th>
<th>Theo Price</th>
<th>IV</th>
<th>Delta</th>
<th>Theta</th>
<th>Vega</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 20 2016 130 Put</td>
<td>-1</td>
<td>2.10</td>
<td>2.16</td>
<td>0.40</td>
<td>30.00</td>
<td>15.738</td>
<td>11.35</td>
<td>-3.792</td>
</tr>
<tr>
<td>May 20 2016 135 Put</td>
<td>-1</td>
<td>3.85</td>
<td>3.95</td>
<td>2.10</td>
<td>30.00</td>
<td>52.776</td>
<td>18.725</td>
<td>-6.269</td>
</tr>
</tbody>
</table>

From the put side the 130 put decreased $1.76 or 84% while the 135 put decreased by $1.75 or 45%. Both of these trades have benefited from time decay.

Trading Pitfalls: Many traders lose sight of their original plan when facing a losing position. Remember why you entered into the trade and consider the additional risks of continuing to hold a losing position.

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### Managing the Trade

<table>
<thead>
<tr>
<th>Price</th>
<th>Date</th>
<th>IV Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>130</td>
<td>05/16/2016</td>
<td>30</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Price falls</th>
<th>Time passes</th>
<th>Volatility increases</th>
</tr>
</thead>
</table>

#### Long Call

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Qty</th>
<th>Bid</th>
<th>Ask</th>
<th>Theo Price</th>
<th>IV</th>
<th>Delta</th>
<th>Theta</th>
<th>Vega</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 20 2016 130 Call</td>
<td>1</td>
<td>6.75</td>
<td>6.85</td>
<td>1.83</td>
<td>30.00</td>
<td>50.762</td>
<td>-18.278</td>
<td>6.068</td>
</tr>
<tr>
<td>May 20 2016 140 Call</td>
<td>1</td>
<td>1.41</td>
<td>1.46</td>
<td>0.03</td>
<td>30.00</td>
<td>1.825</td>
<td>-2.047</td>
<td>0.681</td>
</tr>
</tbody>
</table>

The 130 call decreased by $5.02 or 73% while the 140 call decreased by $1.43 or 98%. Both trades have been negatively impacted by the passage of time as well as the drop in price.

#### Short Put

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Qty</th>
<th>Bid</th>
<th>Ask</th>
<th>Theo Price</th>
<th>IV</th>
<th>Delta</th>
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<tbody>
<tr>
<td>May 20 2016 130 Put</td>
<td>-1</td>
<td>2.10</td>
<td>2.16</td>
<td>1.82</td>
<td>30.00</td>
<td>49.237</td>
<td>18.134</td>
<td>-6.069</td>
</tr>
<tr>
<td>May 20 2016 135 Put</td>
<td>-1</td>
<td>3.85</td>
<td>3.95</td>
<td>5.33</td>
<td>30.00</td>
<td>85.446</td>
<td>10.302</td>
<td>-3.477</td>
</tr>
</tbody>
</table>

The 130 put decreased by $0.28 or 13%, the loss from time decay had a greater impact than the drop in price and increase in IV resulting in a profitable trade. The 135 put increased in price by $1.48 or 38%. This trade was negatively impacted by the drop in price and increase in IV.

With options trading there is not a “one size fits all” strategy. Each strategy, strike, and expiration has its own set of trade-offs that need to be considered before putting on a trade.

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Managing Risk through Strategy Selection

There are a number of options strategies that assist traders with risk management by defining your maximum risk at the outset of the trade.

**Long Call or Put:** By purchasing an option your risk is limited to the debit paid. While the loss can still be 100% of your investment, this is usually less capital than would have been required to buy or short the stock itself.

**Credit Spread:** Options sellers can change define their risk profile through credit spreads. To accomplish this a put seller would buy a put at a lower strike or a call seller would buy another call at a higher strike. The difference between the strikes minus the premium received becomes the max loss. The trade off here is less overall premium received.

**Protective Put:** A long stock trader can purchase a put contract to protect from drop in price. The risk is limited to the difference between the current price of the stock minus the strike price selected minus the premium paid. The trade off here is the premium that is paid to purchase the contract.
Creating a Plan for Defined Risk Trade

**Directional bias:** Neutral to Bearish

**Time:** Time decay is non-linear with the amount of decay increasing the closer the contract gets to expiration. Because of this, many traders look for expirations between 30-45 days out where time decay begins to increase more on a day to day basis.

**Volatility:** Volatility is slightly above its 50th percentile. The assumption for this example is for volatility to remain near its mean.

One strategy that takes advantage of this outlook is the Bear Call Spread

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Creating a Plan for Defined Risk Trade

One method that can be used in strike selection is probability analysis. An option seller will look at probability that the option expires worthless on expiration. The trade off here is that the higher the probability of success, the lower the premium that is being received. For this example we are looking for a strike price with approximately a 30% probability of finishing above the lower strike price using the current 30 day IV.

Our expiration selection is 44 days out to May 20th attempting to take advantage of increasing time decay. Probability analysis has determined the lower strike price of $20. The last selection is the upper strike which will define the risk on the trade.

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Creating a Plan for Defined Risk Trade

In choosing the upper strike again there is trade off between risk and reward.

- The higher the strike the more up front premium that is brought in, however the greater the defined risk parameter.
- Choosing a lower strike will reduce the premium received, however it will also lower the defined risk.

This is an example of a 2 point spread. The credit received is $0.32. The max loss is $1.68 which is calculated by taking the difference between the strikes ($2) and subtracting the premium received ($0.32).

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To compare, a naked call writer would have brought in $0.70 premium by selling the 20 strike call. Without buying the $22 strike though they are exposed to unlimited risk.
Key Takeaways

- Have a method of analysis for time, direction, and volatility.
- Use the analysis to choose the right strategy
- The strategy should also match your risk tolerance
- Define your entry and exit strategy points before putting on a trade
- Use the Fidelity Notebook tool to capture the details of your plan
Get a Plan!

This concludes today’s presentation.

Thank you for attending.

Please join the Trading Strategy Desk for our upcoming webinars:

- May 19th – How to Trade Single Leg Options
- June 7th – Options Quarterly Education Day

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https://www.fidelity.com/learning-center

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