Introduction to Hedging: Protection in Uncertain Times

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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.
- There are additional costs associated with option strategies that call for multiple purchases and sales of options, such as spreads, straddles, and collars, as compared with a single option trade.

- The information in this presentation, including examples using actual securities and price data, is strictly for illustrative and educational purposes only and should not be construed as an endorsement or recommendation.
- Trailing Stop orders are monitored between 9:30 AM and 4:00 PM Eastern Standard Time and are maintained on a separate order file on a "not held" basis until triggered, at which time they are sent to the marketplace. Additional information about Trailing Stop orders is available at Fidelity.com (link: https://www.fidelity.com/bin-public/060_www_fidelity_com/documents/Conditional_Orders.pdf)
- ATP: Active Trader Pro Platforms℠ is available to customers trading 36 times or more in a rolling 12-month period.
- P/L Calc: Profit probability shows how likely a particular option trade (or combination of trades) will be profitable, based on a calculation that takes into account the price of the trade and the expected distribution of stock prices based on the 90-day historical volatility.

Goals of Today's Presentation

- **Help grasp the general concept of hedging and the different methods that could be used**

What we will cover:

- What is hedging and why do trader's do it
- Stop, Trailing Stop, and Conditional orders
- Protective Puts
- Beta… what is it?
- Collars

Introduction to Hedging

What is hedging?

- Protecting a security and/or a portfolio to minimize the impact of an adverse move.

Why do trader's hedge?

- Concern with recent volatility, but still bullish
- Overall market or sector weakness
- Shift in fundamental information that caused you some concern
- Technical analysis is providing possible bearish signals
- Tax situation is not favorable to liquidate at this point

Trader's View: Hedging is not the same as speculation. Hedging is used to protect from, not profit from, an adverse price move.

Order Types Used to Manage Equity Positions

Stop loss	Dormant market order until triggered by last trade at or below the defined price (viewed by the market)
Stop limit	Dormant limit order until triggered by last trade at or below the defined price (viewed by the market)
Trailing stop loss	Moving dormant market order where the trigger/stop is defined by percentage or specific amount from the defined trigger(last, bid, ask) (in house)
Trailing stop limit	Moving dormant limit order where the trigger/stop is defined by a percentage or specific amount from the defined trigger (last, bid, ask)(in house)
Conditional orders	These orders can also be used, and triggered based on any number of criteria

Trader's View: Price alerts can be setup as an alternative to using a stop order

-Trigger prices pertain to equities

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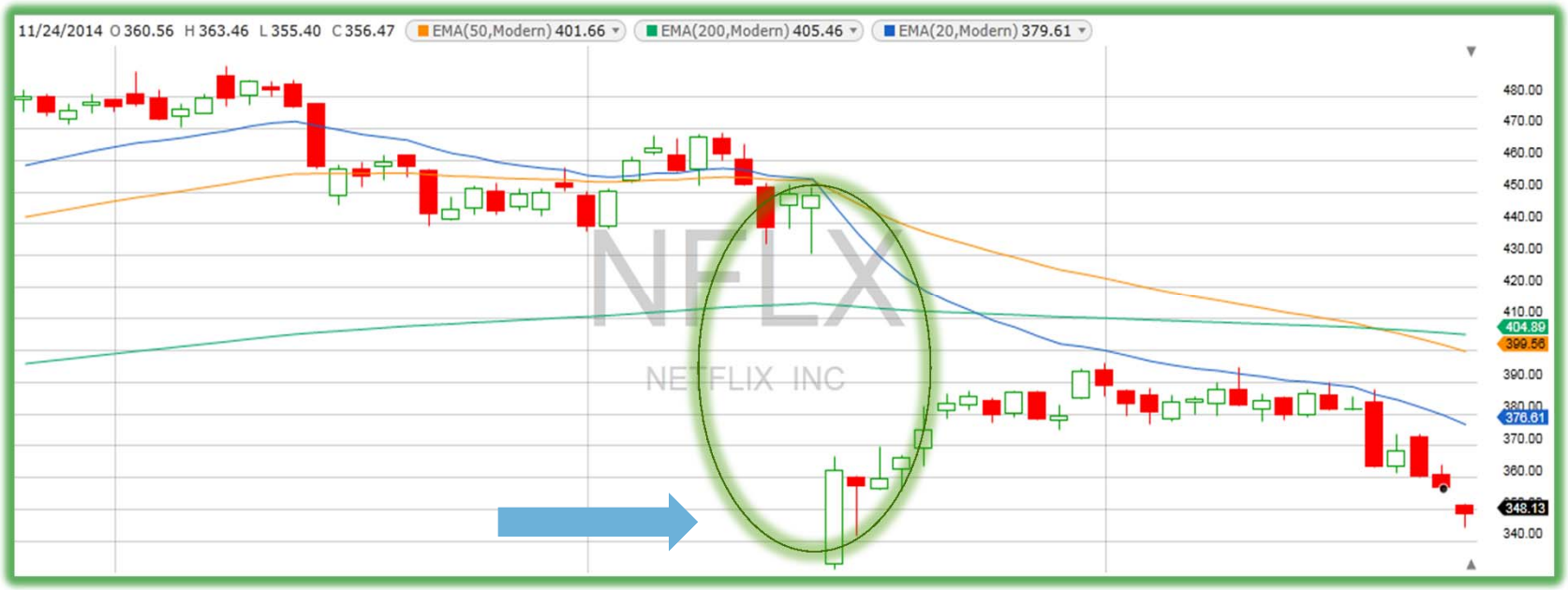
Enemy of Stop Orders: Gapping Risk



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Security gapping could cause a much different result than what was expected from the stop order.

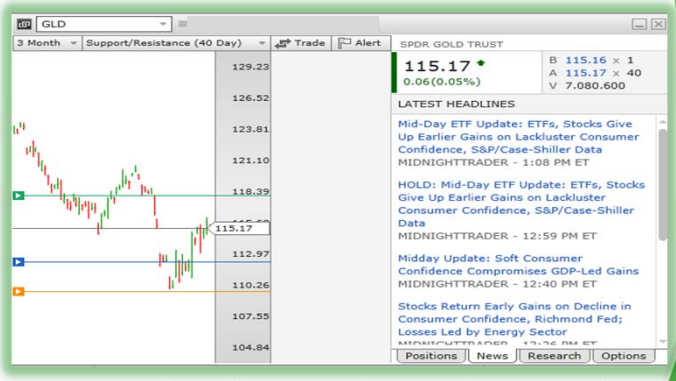
Stop and Trailing Stop Loss/Limit breakdown

Advantages:

- Low cost (commission)
- Automatically closes the position
- Disciplined trading process reduces emotional decisions
- Attaches price, or percentage, to define loss threshold
- Exit position when important support/resistance level breached

Disadvantages:

- Gapping risk (for stop orders)
- Order never executing because the security continues to move (stop limits)
- Liquidate at unfavorable time (tax situation, trigger too close)



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Ways to Hedge

- A hedge can be anything that gains value as the position you are concerned about is losing value.
- A true hedge defines the potential loss on a long position.
- The more separation between the position of concern and its hedge, the less effective the hedge will be

There are many popular ways to hedge:

1. Using put contracts on individual positions
2. Using puts on an index as a proxy for a portfolio or subset of a portfolio
3. Going long securities that have a history of moving in the inverse direction of the position

Buying Puts to Protect Position/Portfolio

- Premium is spent to pay for protection on security or index, puts increase in value when underlying decreases in value

Advantages:

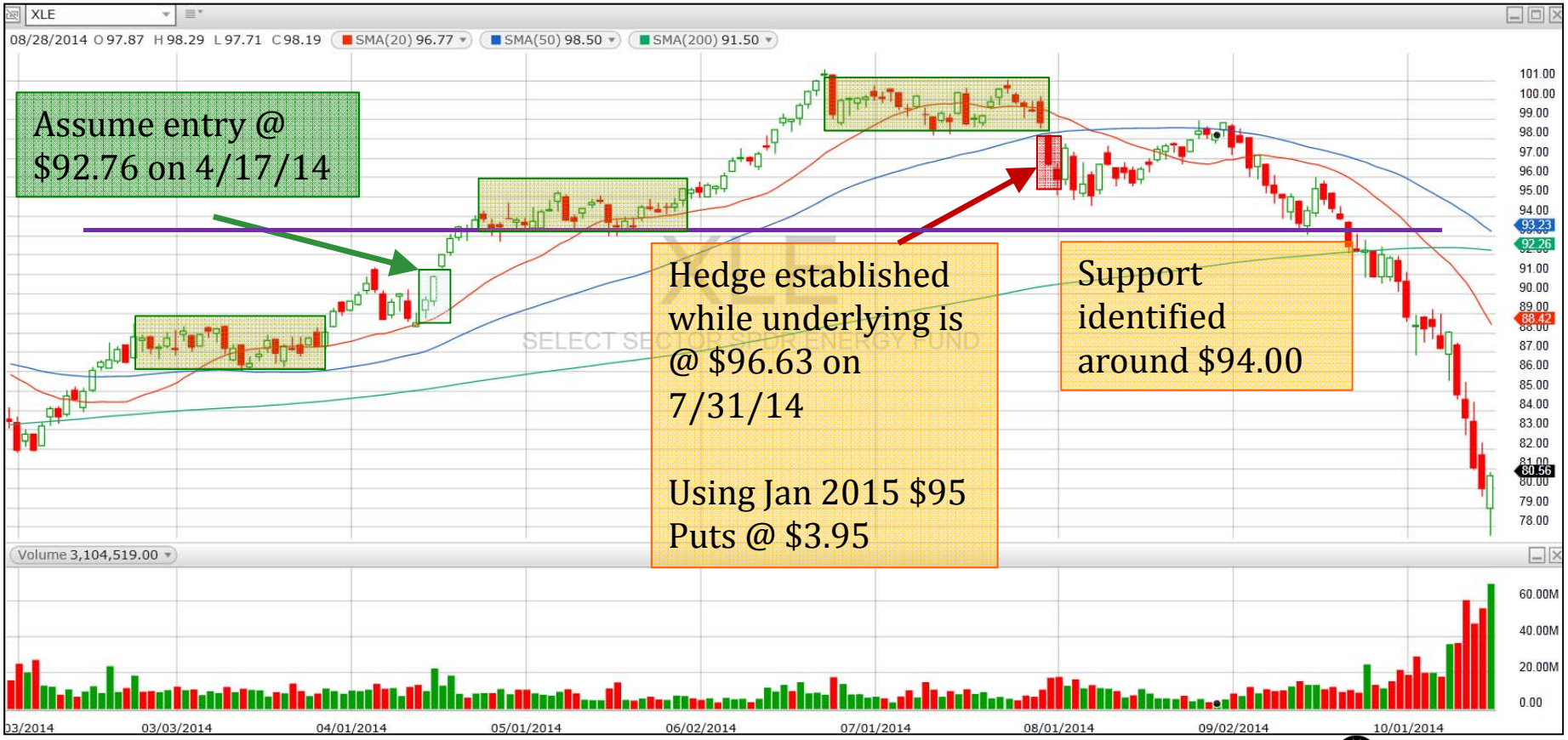
- Acts as a true hedge
- The contract holder controls if/when the contract is exercised
- Allow more flexibility for managing individual tax situations
- No gapping risk while the hedge is on

Disadvantages:

- Cost to establish and manage – Increases breakeven on the position
- Often costs more when the true "need" arises
- Time to manage
- Requires an understanding of a more complex financial instrument

Trader's View: Hedge begins at breakeven of puts (Strike – Premium paid). Remember you paid a premium to have the hedge.

Buying Puts to Protect Position/Portfolio



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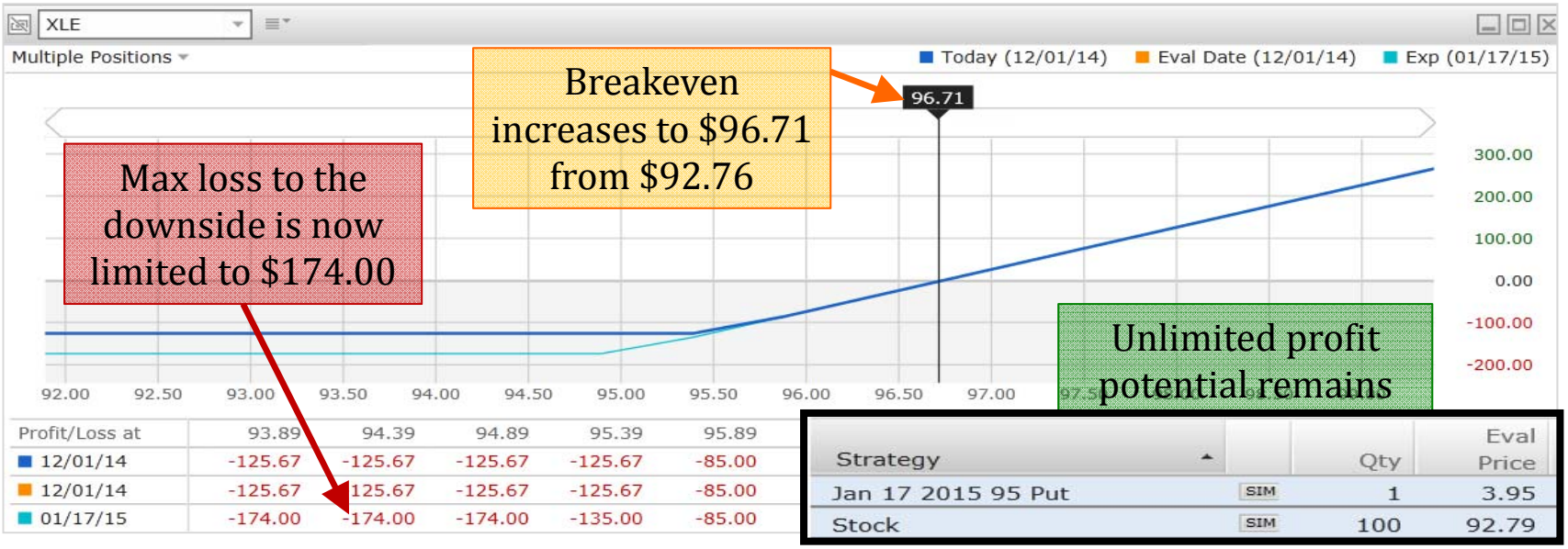
Buying Puts to Protect Position/Portfolio



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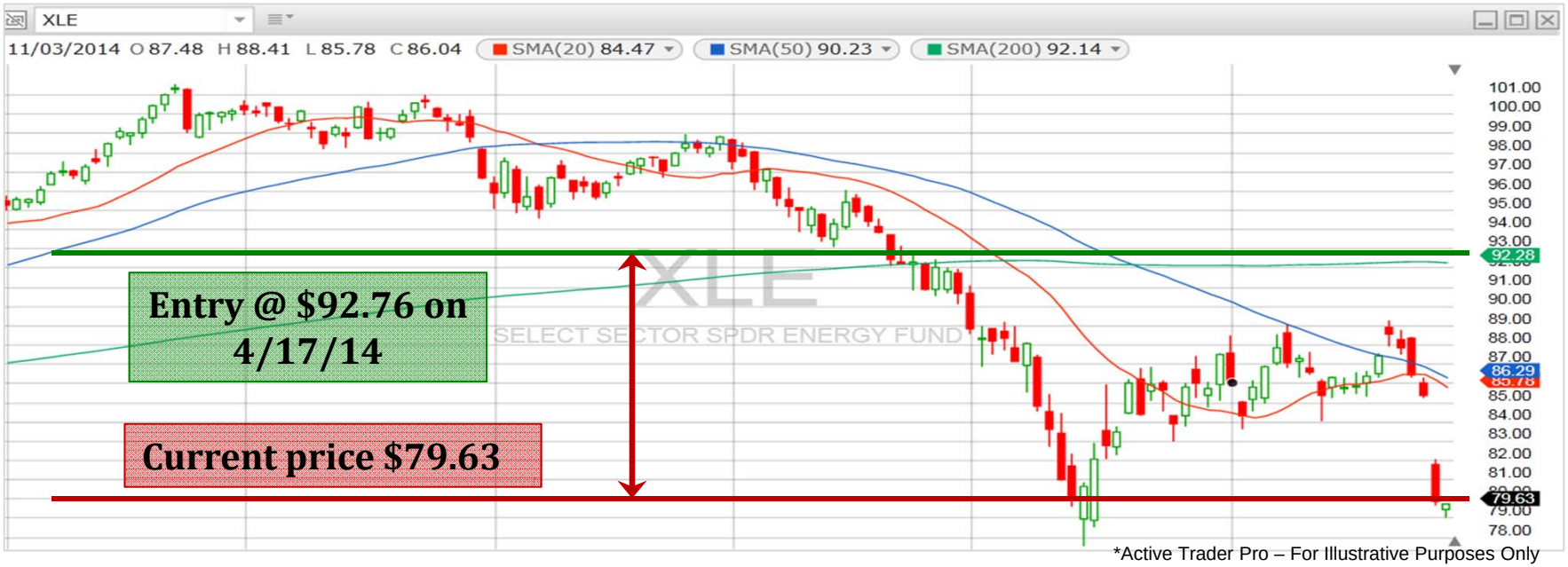
Buying ATM protective puts defines the loss on the position

Trader's View: Make sure to provide appropriate duration. Remember the closer to expiration, the higher the time decay with each passing day.

Buying Puts to Protect Position/Portfolio



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Hedged Position:

Loss Limited to $174

Unhedged Position:

Loss of $13.13/share = $1313 total loss

Buying Puts to Protect Position/Portfolio

- For larger portfolios, some trader's will use puts on an **index** or **ETF** as a hedge
  - Most common index or ETF to hedge portfolios is the S&P 500 (SPY, IVV) – other indices may be more appropriate depending on the portfolio
  - Not exact, risk of tracking error

- Buying puts for each individual positions provides the most effective hedge, but is usually more expensive and requires more time to manage

- To calculate the # of contracts needed, take the current value of target asset to hedge divided by total market value that the puts cover (usually Strike Price * 100)

For example: At the time of this writing, the S&P 500 was at 2050. Each ATM contract covers $205,000 (2050 * 100). A closely correlated $1,000,000 equity portfolio could be hedged with 5 puts on the index.

Trader's View: If using index or ETF put contracts, consider the differences in exercise style and deliverable on the contracts

Beta… What is it?

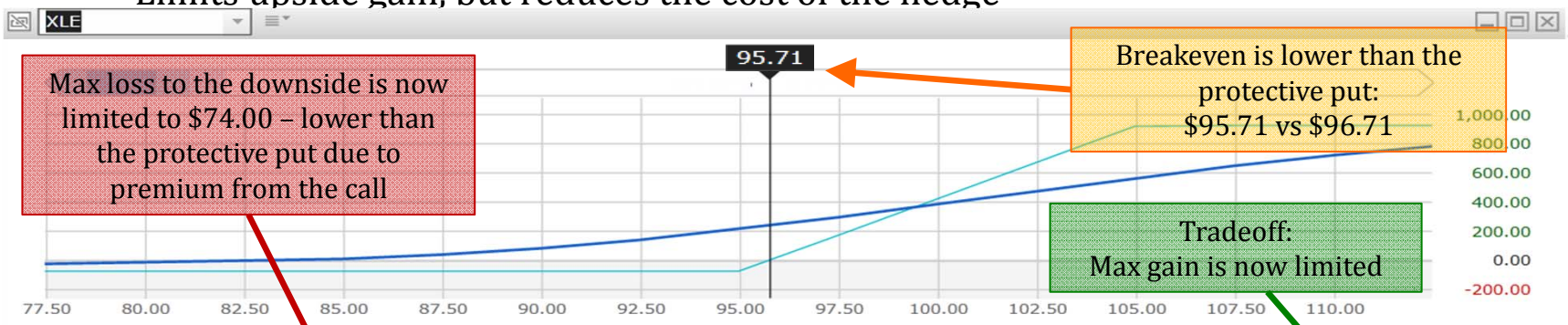
- Measures the sensitivity of price change of an underlying compared to a benchmark
- A Beta of 1.00 means the asset's prices move together
- The most common benchmark traders use is the S&P 500 but beta weighting can be done between any 2 assets
- Beta is not a static measure, it is constantly changing

	Beta= 2
S&P ↑ 1%	Security ↑ 2%
S&P ↓ 1%	Security ↓ 2%

Trader's View: Beta weighting the portfolio allows a trader to adjust the hedge to become more effective, but beta is constantly changing

Collars

- **Collar**: Buying a protective put and reducing the cost by selling an OTM call
  - Limits upside gain, but reduces the cost of the hedge



Profit/Loss at	87.45	89.95	92.45	92.50	94.95	97.45	99.95	102.45	104.95	107.45	109.95	112.45
12/01/14	39.87	82.92	140.66	141.96	212.62	295.59	385.83	478.05	567.00	649.36	721.76	782.89
12/01/14	39.87	82.92	140.66	141.96	212.62	295.59	385.83	478.05	567.00	649.36	721.76	782.89
01/17/15	-74.00	-74.00	-74.00	-74.00	-74.00	171.00	421.00	671.00	921.00	926.00	926.00	926.00

Strategy		Qty	Eval Price
Jan 17 2015 105 Call	SIM	-1	1.00
Jan 17 2015 95 Put	SIM	1	3.95
Stock	SIM	100	92.79
Summary			

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Trader's View: A put spread can also be used to reduce the cost of the protective put, but it only protects the position down to the short strike

Introduction to Hedging

	Stop Orders	Protective Puts	Index Puts	Collars
Cost	Cost of a commission	Most costly, individual position basis	Usually less costly than buying on individual positions	Selling the call reduces the cost of the hedge
Upside	Unlimited	Unlimited	Unlimited	Limited
Effectiveness	Does not serve as a true hedge	Most effective due to direct relationship with the underlying	Effectiveness will vary depending on level of correlation between index and the stock portfolio	Most effective due to direct relationship with the underlying
Ease of Management	Dependent on the number of positions – may require significant or little effort	May require significant time and effort to manage	Generally requires the least time and effort to manage	May require significant time and effort to manage

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Key Takeaways

- Hedging is done to minimize the impact of an adverse move:
  - Short term volatility experienced with bullish outlook
  - Overall market weakness
  - Liquidating would create unfavorable tax situation
  - Shift in fundamentals
  - Technical indicators are giving bearish sentiment but long term outlook bullish
- Stop and trailing stop orders can help manage risk for the cost of a commission, but do not serve as a true hedge
- Protective puts serve as an effective hedge, but at the cost of the premium
- The stronger the relationship between the hedge, and the asset it is intended to protect, the more effective the hedge will be
- Collars allows for more cost effective hedges at the cost of upside potential

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Introduction to Hedging

This concludes today's presentation.

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