Options for Income

Disclosures

- ✓ Options trading entails significant risk and is not appropriate for all investors. Prior to trading options, you must receive a copy of Characteristics and Risks of Standardized Options, which is available from Fidelity Investments, and 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.
- ✓ **Characteristics and Risks of Standardized Option**
- ✓ The information in this presentation, including examples using actual securities and price data, is strictly for illustrative and educational purposes only and is not to be construed as an endorsement, recommendation.
- ✓ Annualized returns cited might be achieved only if the parameters described can be duplicated and there is no certainty of doing so.

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Goal of this webinar

To discuss option strategies that can be used to generate income, and to show investors how to build, evaluate, and manage these strategies to reflect a level of risk/return that is appropriate for their specific portfolios.

Topics that will be covered

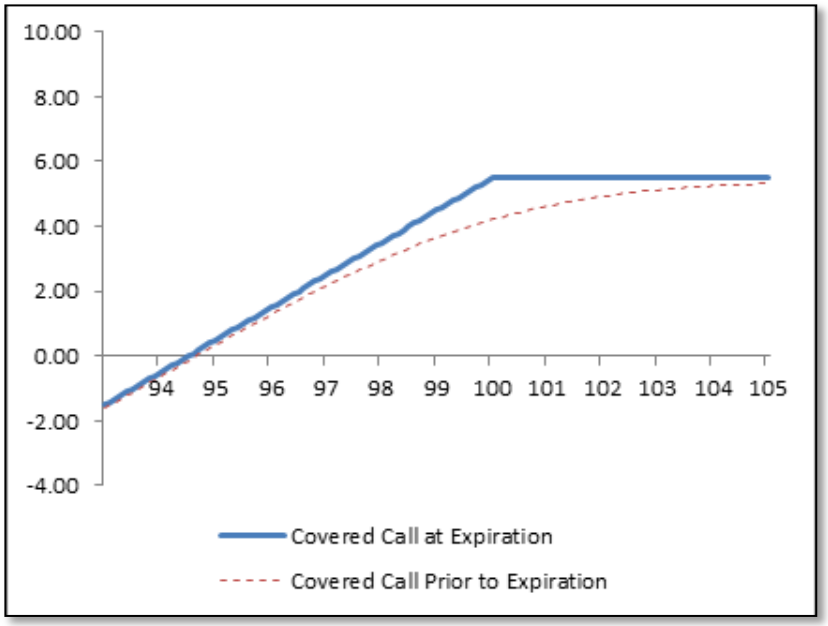
- Proper evaluation for income focused option strategies
- Common selling strategies used to generate income
- Matching strike price and expiration selection to your objective
- Setting expectations and knowing what affects option premium
- Managing risk and avoiding common mistakes for income generation strategies

Covered Call Strategy

Profit/Loss diagram and table: covered call

Long 100 shares at 98.00

Short 1 100 Call at 3.50



Outlook:
Bullish/neutral

Construction:
Buying (or owning) stock and selling call options on a share-for-share basis

Max Gain:
(Strike Price + Call premium received) – Cost of the long shares

Max Loss:
Substantial (cost of the long shares – call premium received

Breakeven @ expiration:
Cost of long shares - call premium received

*A full explanation of this strategy is available using the **Option Strategy Guide in Fidelity's Learning Center** or by watching the archived webinar titled **"Writing Covered Calls"***

A covered call writer forgoes participation in any increase in the stock price above the call exercise price and continues to bear the downside risk of stock ownership if the stock price decreases more than the premium received.

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Short Put Strategy

Outlook:
Bullish/Neutral

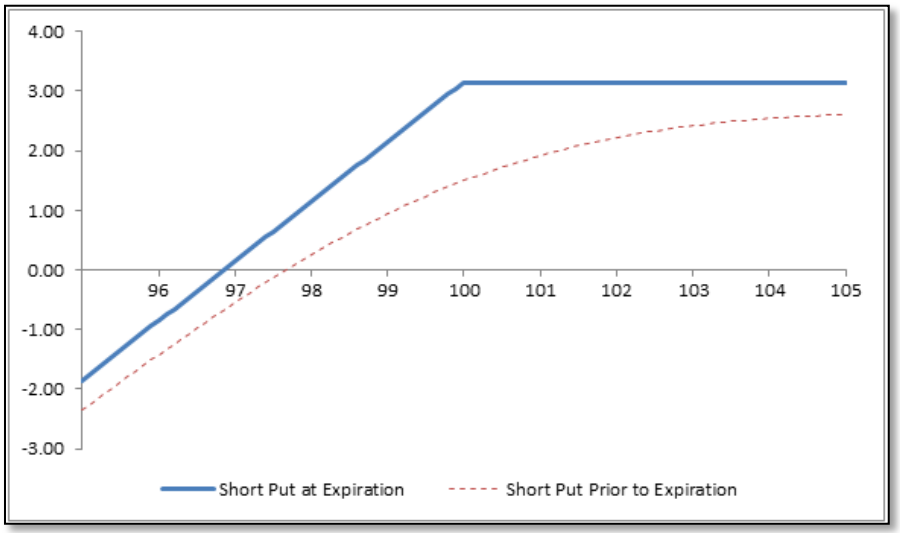
Construction:
Selling a put (cash-covered or naked) in return for premium

Max Gain:
Premium received

Max Loss:
Substantial (but limited to the strike price - premium)

Breakeven @ expiration:
Strike price – Premium received

Profit/Loss diagram and table: Short 100 Put @ 3.15



*A full explanation of this strategy is available using the **Option Strategy Guide in Fidelity's Learning Center** or by viewing the archived webinar titled **"Selling Puts"***

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Calculating Potential Return

Evaluating using Rate of Return potential (ROR):

- Static Rate of Return (aka. Unassigned ROR)
  - ROR earned by an OTM covered call or OTM short put if the option contract expires worthless
  - ***Premium / Break-Even***
- Assigned / If Called Return (covered calls)
  - Assumes assignment (contract is ITM on expiration)
  - Includes the premium and profit/loss on the stock position
  - ***(Premium +/- Difference between stock purchase price and strike) / Break-Even***

Calculating Potential Return - Example

Static Rate of Return =

Premium / Break-Even

$.94 / $179.91 = .52%

(Breakeven based on share price @ $180.85 - Premium of $.94)

Assigned/If Called Return (Covered Calls) =

(Premium + Gain/Loss on shares) / Break-Even

$.94 + $2.15 / $179.91 = 1.72%

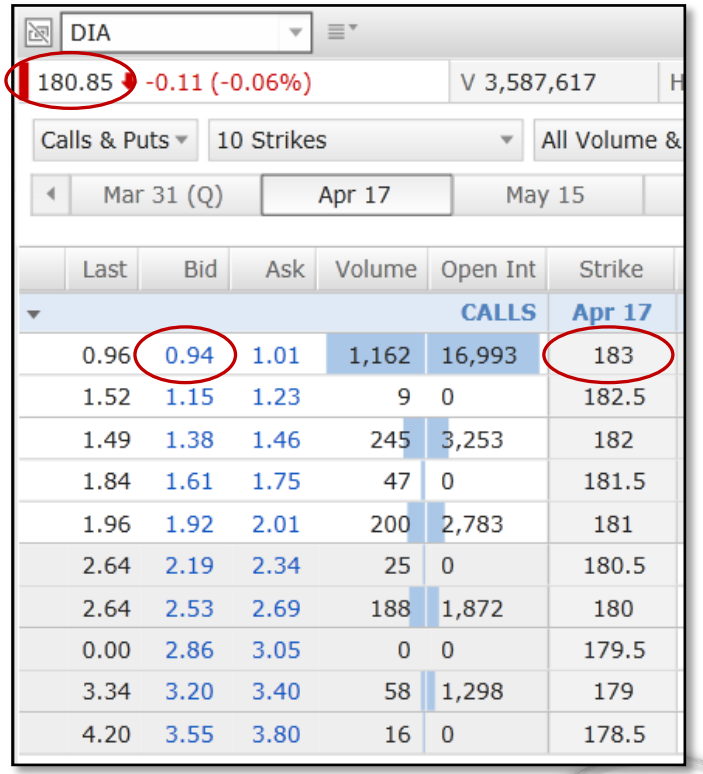
(Gain in this example based on buying @ $180.85/selling @ $183.00)

These numbers can be annualized by multiplying them by the following formula:

# of days in a year / # of days in the trade *(27 at the time of this writing)*

*Annualized Static ROR = .52% * (365/27) =* ***7.03%***

*Annualized Assigned ROR = 1.72% * (365/27) =* ***23.25%***



Last	Bid	Ask	Volume	Open Int	Strike
				CALLS	Apr 17
0.96	0.94	1.01	1,162	16,993	183
1.52	1.15	1.23	9	0	182.5
1.49	1.38	1.46	245	3,253	182
1.84	1.61	1.75	47	0	181.5
1.96	1.92	2.01	200	2,783	181
2.64	2.19	2.34	25	0	180.5
2.64	2.53	2.69	188	1,872	180
0.00	2.86	3.05	0	0	179.5
3.34	3.20	3.40	58	1,298	179
4.20	3.55	3.80	16	0	178.5

Image above is from a customized Option Chain in Active Trader Pro

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Importance of Time Value

There are 2 components to an option's price – **Intrinsic value** and **Time value**

	Last	Bid	Ask	Intrinsic Value	Time Value
PUTS					
	3.55	3.65	4.10	3.31	0.565
	0.00	3.50	3.75	2.81	0.815
	3.25	3.25	3.40	2.31	1.015
	0.00	2.89	3.15	1.81	1.21
	2.62	2.72	2.86	1.31	1.48

- **Intrinsic value** is the measure of the true value of the "right" the option represents – it is the difference between the stock price and the strike price
- **Time value** is a measure of "uncertainty" – the potential that the option could hold more intrinsic value in the future
  - All else equal, the time value erodes as expiration nears – the uncertainty about the stock's price movements between now and expiration gets lower and lower
- Selling strategies (selling covered calls and selling puts) aim to take advantage of the erosion in time value throughout the life of the trade – the time value in the premium represents the potential "reward" to the seller

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Importance of Time Value

DIA

180.85 -0.11 (-0.06%) | V 3,587,842 | HV30 12.43 IV30 11.59 | C/P Ratio: BULLISH BEARISH

Calls & Puts | Strikes from 182 to 184 | All Volume & Open Int | (W) | Adj

Mar 31 (Q) | **Apr 17** | May 15 | Jun 19 | Jun 30 (Q) | Sep 18 | Sep 30 (Q) | Dec 31 (Q) | Jan 15 2016 | Mar 18

Last	Bid	Ask	Volume	Open Int	Intrinsic Value	Time Value	Strike	Last	Bid	Ask	Volume	Open Int	Intrinsic Value	Time Value
						CALLS	Apr 17	PUTS						
0.63	0.59	0.66	305	3,206	0.00	0.625	184	3.55	3.65	4.10	24	78	3.31	0.565
1.02	0.75	0.82	8	0	0.00	0.785	183.5	0.00	3.50	3.75	0	0	2.81	0.815
0.96	0.94	1.01	1,162	4,353	0.00	0.975	183	3.25	3.25	3.40	80	386	2.31	1.015
1.52	1.15	1.23	9	0	0.00	1.19	182.5	0.00	2.89	3.15	0	0	1.81	1.21
1.49	1.38	1.46	245	3,160	0.00	1.42	182	2.62	2.72	2.86	98	460	1.31	1.48

Image above is from a customized Option Chain in Active Trader Pro

- The **Time Value** of the calls and puts at each strike price is nearly equivalent
- A covered call and a cash secured put of the same strike price have almost identical risk (max loss, breakeven) and reward (max gain) profiles
- The only difference to the trader is the probability that the trade will result in the acquisition or sale of the underlying security
- At the money contracts have the most time value, but is not always the best choice

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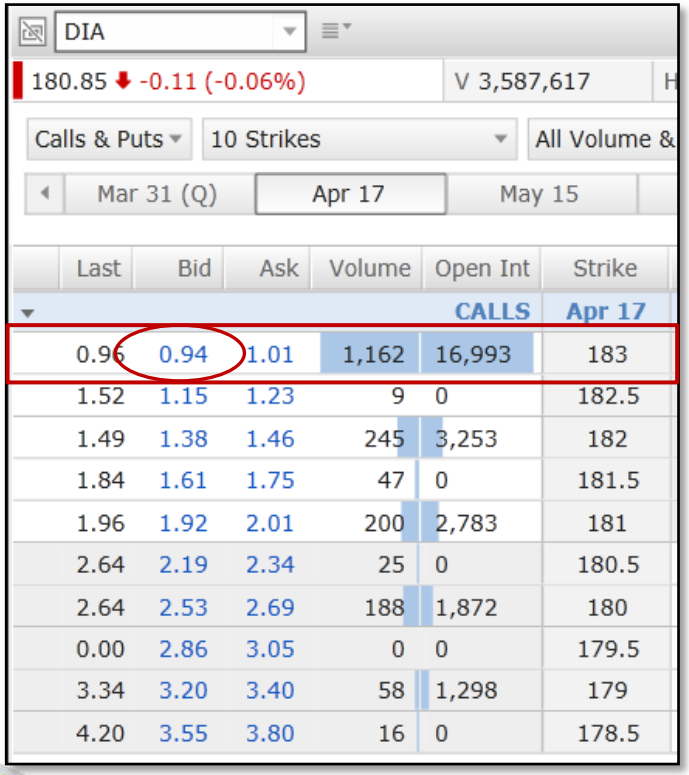
Generating a Steady Income Stream

Example: Assumes DIA trading @ $180.84 with 27 days to expiration



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1.84	1.61	1.75	47	0	181.5
1.96	1.92	2.01	200	2,783	181
2.64	2.19	2.34	25	0	180.5
2.64	2.53	2.69	188	1,872	180
0.00	2.86	3.05	0	0	179.5
3.34	3.20	3.40	58	1,298	179
4.20	3.55	3.80	16	0	178.5

- To start, assume a trader owns 100 shares of DIA in their stock portfolio. Their objective has shifted from growth to being more income focused, and their outlook is neutral/slightly bullish. As such, they decide to **sell 1 April $183 call for $.94**
- As expiration nears, assume DIA has increased in value and the call is in the money (Stock Price >Strike)
- The trader **lets their shares be called away** (Maximum Gain has been achieved!!), selling them at the strike price of $183, generating 1.72% total return and .52% in income over the 27 day period (example from slide 7)

But it doesn't end there....

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Generating a Steady Income Stream

Example: Assume it is now April 17th, and the shares have been sold due to call assignment, leaving the trader with a cash position of $18,394.00
(Strike price of $183.00 + $.94 in collected premium * 100 shares)

DIA
183.85 -0.11 (-0.06%)
Calls & Puts | 10 Strikes
May 15 | Jun 19

Strike	Last	Bid	Ask
May 15	PUTS		
186	3.25	3.25	3.40
185.5	0.00	2.89	3.15
185	2.62	2.72	2.86
184.5	2.37	2.43	2.59
184	2.30	2.25	2.39
183.5	1.96	2.05	2.16
183	1.87	1.87	1.97
182.5	1.43	1.70	1.81
182	1.54	1.55	1.63
181.5	1.24	1.40	1.51

Image above using hypothetical pricing data

- In this situation assume the trader's outlook is still neutral, but they want a lower risk trade. With DIA now @ $183.85, they decide to **sell 1 Out of the Money May $182 put for $1.55**

Static Rate of Return = $1.55 / $180.45 = **.86%**

Let's look at 2 potential outcomes at expiration:

Put is assigned

→ The trader now owns the shares, bought at the strike price

→ Start the process again with a new covered call against those shares

Put Expires Worthless

→ The cash is available and a new cash covered put can be established

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Generating a Steady Income Stream

- This process of rotating covered calls and cash secured puts can continue as long as the underlying continues to offer opportunity
- Proper security selection is critical - the strategy MUST match the outlook – this is not a one size fits all, foolproof strategy
- Most traders find that the slightly out of the money contracts offer a reasonable balance of risk/reward
- Strike price selection can be used to reduce risk, but only to a limited degree
- There may be events that cause you to exit the trade early, but it should not be managed for the sole purpose of avoiding assignment

What factors affect the premium?

1. Money-ness of the option being sold (Strike Selection)

- Out of the money options offer lower premiums
- At the money option contracts have the most time value
- In the money options offer higher premiums

2. Time to expiration (Expiration Selection)

- Nearer term expirations offer the potential for the highest annualized return but offer a lower up front premium
- Longer dated expirations decay at a slower rate, but offer the advantage of more upfront premium (income certainty)

3. Expected Movement from the Underlying (Implied Volatility)

- Higher implied volatility (expected price movement) results in higher premiums
- When selling options, if that expected volatility becomes realized volatility, it can result in substantial losses

Generating a Steady Income Stream

Matching strike selection to price outlook and risk tolerance

Concerned about a small drop in price (lower risk)?	*Completely neutral?*	*Slightly bullish (higher risk)?*
In the money buy-write	At the money buy-write	Out of the money buy-write
OR	OR	OR
Out of the money cash covered put	At the money cash covered put	In the money cash covered put

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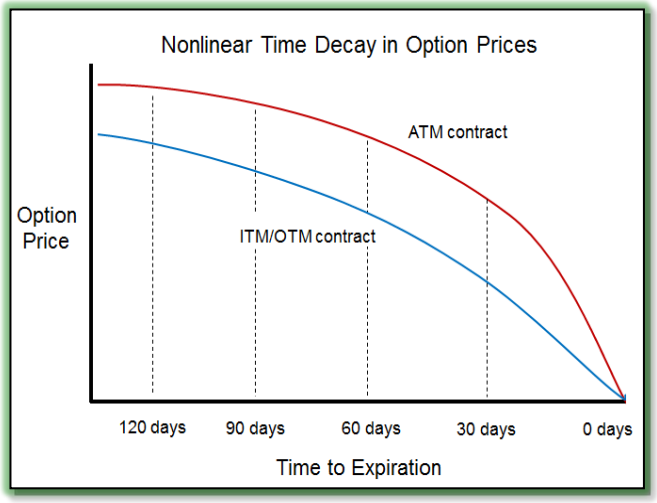
Impact of Expiration Selection



- The rate at which the time value of an option decays typically accelerates as expiration comes closer, meaning shorter term options have the higher rate of decay
- This acceleration becomes most apparent with 30-45 days to expiration
- Theta measures how much time value erodes from the option contract each day (assumes all else equal)
- The time value on every option contract is $0 at expiration

What could go wrong….?

- Remember, there are 2 parts to an option's value – Intrinsic Value and Time Value
- As the stock price moves, time value can be replaced by intrinsic value – this is why price movement (realized volatility) is viewed as a risk to option sellers
- With both covered calls and cash covered puts, the directional risk is to the downside

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Impact of Expiration Selection

- With cash on hand, a trader feels DIA offers a good opportunity to generate income by selling puts. With DIA at $180.85, the trader has a neutral price outlook, and the following contracts to choose from:

Strike		Last	Bid	Ask	Volume	Open Int	Intrinsic Value	Time Value	Theta
Apr 17	PUTS								
181		2.30	2.25	2.39	241	996	0.31	2.01	-0.0409
Jun 19	PUTS								
181		4.80	5.10	5.30	226	558	0.29	4.91	-0.0263

Image above is from a customized Option Chain in Active Trader Pro

Option 1:	***Option 2:***
Write an April 17th $181 Put for $2.25 in premium	**Write a June 19th $181 Put for $5.10 in premium**

Which is better….?

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Impact of Expiration Selection

Q: Which is better?

A: One is not better than the other. They each offer different benefits/tradeoffs

- Due to higher Theta, selling **shorter term options** multiple times offers a **better potential annualized return** than selling longer term options (assumes present conditions persist)
- **Longer term options** offer more upfront premium, resulting in a **lower breakeven**, and **more income certainty**

	Mid Price	Break-Even	Contract Theta	Static ROR	# Days in the Trade	Annual Static ROR
APR $181 Put	$2.35	$178.65	-.0409	1.32%	27	17.84%
June $181 Put	$5.20	$175.80	-.0263	2.96%	90	12.00%

- As stated earlier, annualized returns assume the same conditions are available in the future as those that exist now – this is rarely the case!

*The **tradeoff** for a lower risk trade is a lower reward*

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Impact of Expiration Selection

	Shorter Term	Longer Term
Common Use	Maximize annual ROR and maintain flexibility (dividends and earnings)	Targeting a specific annual ROR Prioritizing income certainty
Premium	Potential for the higher annualized return (all else equal)	Offer more upfront premium
Risk/ Considerations	Offer the most exposure to time decay Have the highest gamma risk More commissions incurred	Offer more upfront downside protection Lower exposure to time decay Lower gamma risk

Common Pitfalls

1. *Viewing assignment, in and of itself, as a risk*

- If you are not willing to sell a position, you should not write calls against it
- If you are not willing to own a stock, you should not sell puts on it
- If generating income is the objective, assignment should not be seen as a negative (with the exception of large downward price moves or changing outlook)

2. *Going too deep in or out of the money*

- The further away from the at the money strike one goes, the less time value there is in the contract
- While strike price selection can be tailored to the outlook, be careful not to select a strike with minimal/no time value
- If you are not comfortable choosing a strike that offers fair value, this security may not be for you – find another opportunity

Common Pitfalls

3. *Setting unrealistic expectations and taking on too much risk in an effort to meet them*

- It's unrealistic to assume every trade will be a winner
- Option premiums are directly related to the amount of volatility (movement) the market expects in the underlying – know why and if you're comfortable with it

4. *Holding onto losers too long / Failing to manage risk*

- Premiums collected only go so far to reduce the impact of a falling stock
- Establish predetermined exit strategies (based on price, news, market trends, etc.)

5. *Failing to objectively evaluate old opportunities and look for new ones*

- Be able to properly evaluate if a security is offering a good opportunity
- Be comfortable selling winners and cutting losses
- Use the resources available to you to uncover new opportunities
- If the potential reward does not fit the perceived risk, move on

Finding and Evaluating Opportunities

Resources to help with Idea Generation:

- ***Preset Expert Strategies*** – provide ideas based on criteria the professionals use
- ***Stock Screener and ETF screener*** – allow users to find securities that match the criteria they want the underlying to meet (fundamentals, technical trends, analyst opinions, etc.)
- ***Strategy Ideas*** – offer specific strategy specific option trading ideas based on criteria professionals find to be important for the selected strategy
- ***Market Scanner*** – allows the user to look for specific characteristics in an underlying or an underlying's option contracts (volatility comparison, volume, price)

Resources to help with Research/Analysis:

- ***Equity Summary Score*** – An accuracy weighted average analyst score for individual securities
- ***Recognia Chart Pattern Analysis*** – identifies and interprets existing and anticipated technical events on the advanced charts in Active Trader Pro and Fidelity.com
- ***Probability Calculator*** – Allows the used to evaluate statistical probabilities of security reaching a specific price by a specific date
- ***Covered Call Strategy Ideas***–Back-test the performance of user specified covered call strategies
- ***Volatility Analysis*** – IV charts and key statistics help a trader evaluate whether options on a given underlying are relatively "cheap" or "expensive"

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Key Takeaways

- A rotation of covered calls and cash secured puts can be used as an efficient way to generate income on securities where a trader has a neutral to slightly bullish outlook
- Security selection is critical – are you comfortable being long the underlying security?
- You must be able to properly evaluate the tradeoffs in the risk and reward when trading options
- Outlook and objective will help determine proper strike and expiration, but traders often find that using a rotation of slightly OTM contracts, expiring in 30 - 60 days, offers a good risk/reward tradeoff
- Avoid costly mistakes by adopting a risk level you can live with
  - Diversify amongst market capitalization, sectors, geography and style
  - Watch out for concentrated positions (exposure > 5% of portfolio)
  - Consider ETF's to limit volatility
- If it appears too good to be true, then it probably is! - watch out for earnings announcements, dividends, or other events that could lead to significant moves
- Having an exit strategy at the time of trade entry gives a you a reference point when evaluating the trade down the road and reduces emotional decisions
- Use the resources at your disposal to seek out and analyze new opportunities

Income Strategies Using Options

This concludes today's presentation.

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