



# Cherry Picks

tastytrade's Quantitative Newsletter for Traders

November 20, 2018

**Options involve risk and are not suitable for all investors. Please read [Characteristics and Risks of Standardized Options](#) before deciding to invest.**

## FANG Stocks Down

Take a look at the FANG stocks (**Facebook**, **Apple**, **Netflix**, and **Google**) – we show the 1, 2, and 3 month price changes compared to the S&P 500. IV Ranks are all pretty similar – in the high 70s/low 80s. The largest *expected move* is in **NFLX** – the market is expecting a 50% change (either up or down) over the next year. Largest expected move also means that, dollar-for-dollar, options will be the most expensive. Keep positions small.

Symbol	Name	1 Month Price Change	2 Month Price Change	3 Month Price Change
SPY	S&P 500 SPDR	-3%	-9%	-7%
FB	Facebook Inc	-18%	-22%	-26%
AAPL	Apple Inc	-19%	-18%	-17%
NFLX	Netflix Inc	-22%	-29%	-24%
GOOG	Alphabet Class C	-10%	-15%	-17%

## Holiday Trading Schedule

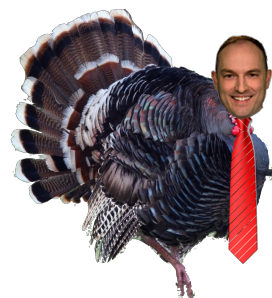
Trading has historically been light on holiday weeks – we expect this year to be no different. Be careful about liquidity.

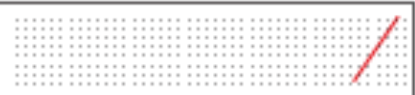
### Holiday Calendar

<b>Equities/ Stocks</b>	Thursday closed all day
	Friday early close at 12 CST
<b>Futures (Equities)</b>	Thursday closing 12 pm CST, reopens 5 pm CST
	Friday open until 12:15 pm CST
<b>Futures (FX, Interest Rates, Energy, Metals)</b>	Thursday closing 12 pm CST, reopens 5 pm CST
	Friday open until 12:15 pm CST

Happy Thanksgiving! Let us know if you have any questions or want to provide us with any trade ideas to share. Thank you!

**Michael Rechenin, PhD**  
research@tastytrade.com

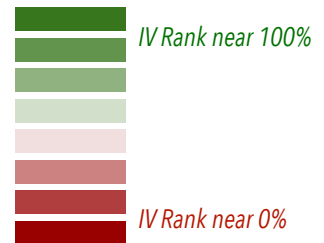




## How to Read the Plots on the Next 5 Pages

**Expected Range Cone.** The colored cone represents a 30-day expected theoretical price range that is calculated from the options' implied volatilities. If the implied volatility is relatively high, then the market is expecting a larger price change in the underlying stock or ETF. From this we can derive the market's 1 standard deviation theoretical expectation of where prices might be in the future. In other words, the market is expecting, with a 68% theoretical probability, that prices will fall within the boundary of the cone at the end of 30 days.

**Cone Color.** The color of the cone is significant. The darker the color, the more "extreme" the implied volatility (IV) which is represented by implied volatility rank (IV Rank). This information can help you decide on a trading strategy.



SPDR S&P 500  
IV: 14  
IV Rank: 36 (Moderately Low)  
Estimated Liquidity: Great

### SPY





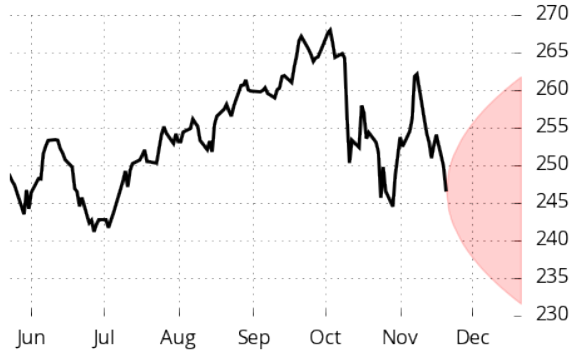
# Current ETF Watchlist



**30-Day Expected Range Plots** – The colored cone represents a 30-day expected theoretical price range that is calculated from the options' implied volatilities. In theory, we expect that prices will stay, with a 68% probability, within the boundary of the cone.

SPDR Dow Jones Industrial Average ETF  
IV: 21  
IV Rank: 45 (Moderately Low)  
Estimated Liquidity: Good  
Correlation with S&P 500: 0.94

## DIA



iShares Inc iShares MSCI Mexico ETF  
IV: 44  
IV Rank: 79 (High)  
Estimated Liquidity: Great  
Correlation with S&P 500: 0.45

## EWX



iShares MSCI Emerging Index Fund  
IV: 29  
IV Rank: 87 (High)  
Estimated Liquidity: Great  
Correlation with S&P 500: 0.75

## EEM



iShares Inc iShares MSCI Brazil ETF  
IV: 37  
IV Rank: 39 (Moderately Low)  
Estimated Liquidity: Great  
Correlation with S&P 500: 0.37

## EWZ



iShares MSCI EAFE ETF  
IV: 20  
IV Rank: 13 (Low)  
Estimated Liquidity: Great  
Correlation with S&P 500: 0.77

## EFA



SPDR DJ Euro STOXX 50 Etf  
IV: 21  
IV Rank: 45 (Moderately Low)  
Estimated Liquidity: Good  
Correlation with S&P 500: 0.68

## FEZ





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**30-Day Expected Range Plots** – The colored cone represents a 30-day expected theoretical price range that is calculated from the options' implied volatilities. In theory, we expect that prices will stay, with a 68% probability, within the boundary of the cone.

iShares China Large-Cap ETF  
IV: 31  
IV Rank: 68 (Moderately High)  
Estimated Liquidity: Great  
Correlation with S&P 500: 0.68

## FXI



SPDR Gold Trust  
IV: 12  
IV Rank: 54 (Moderately High)  
Estimated Liquidity: Great  
Correlation with S&P 500: -0.14

## GLD



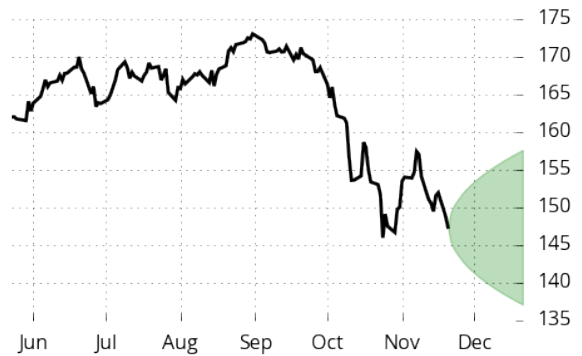
VanEck Vectors Gold Miners ETF  
IV: 28  
IV Rank: 56 (Moderately High)  
Estimated Liquidity: Great  
Correlation with S&P 500: 0.0

## GDX



iShares Russell 2000 ETF  
IV: 23  
IV Rank: 59 (Moderately High)  
Estimated Liquidity: Great  
Correlation with S&P 500: 0.79

## IWM



VanEck Vectors Junior Gold Miners ETF  
IV: 29  
IV Rank: 41 (Moderately Low)  
Estimated Liquidity: Great  
Correlation with S&P 500: 0.04

## GDXJ



iShares U.S. Real Estate ETF  
IV: 17  
IV Rank: 46 (Moderately Low)  
Estimated Liquidity: Great  
Correlation with S&P 500: 0.34

## IYR





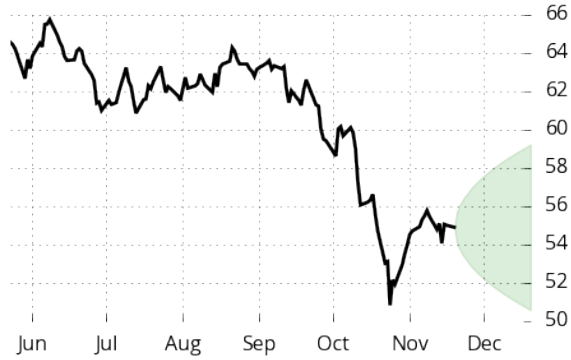
# Current ETF Watchlist



**30-Day Expected Range Plots** – The colored cone represents a 30-day expected theoretical price range that is calculated from the options' implied volatilities. In theory, we expect that prices will stay, with a 68% probability, within the boundary of the cone.

SPDR S&P Regional Banking ETF  
IV: 27  
IV Rank: 52 (Moderately High)  
Estimated Liquidity: Great  
Correlation with S&P 500: 0.44

## KRE



iShares Silver Trust  
IV: 22  
IV Rank: 62 (Moderately High)  
Estimated Liquidity: Great  
Correlation with S&P 500: 0.09

## SLV



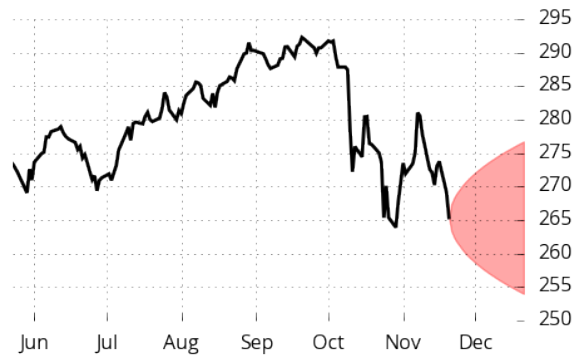
VanEck Vectors Oil Services ETF  
IV: 41  
IV Rank: 75 (High)  
Estimated Liquidity: Great  
Correlation with S&P 500: 0.62

## OIH



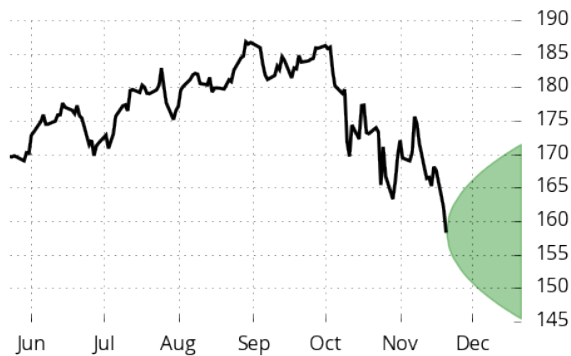
SPDR S&P 500  
IV: 14  
IV Rank: 36 (Moderately Low)  
Estimated Liquidity: Great

## SPY



Invesco QQQ Trust, Series 1  
IV: 28  
IV Rank: 65 (Moderately High)  
Estimated Liquidity: Great  
Correlation with S&P 500: 0.9

## QQQ



iShares 20+ Year Treasury Bond ETF  
IV: 10  
IV Rank: 27 (Moderately Low)  
Estimated Liquidity: Great  
Correlation with S&P 500: -0.25

## TLT





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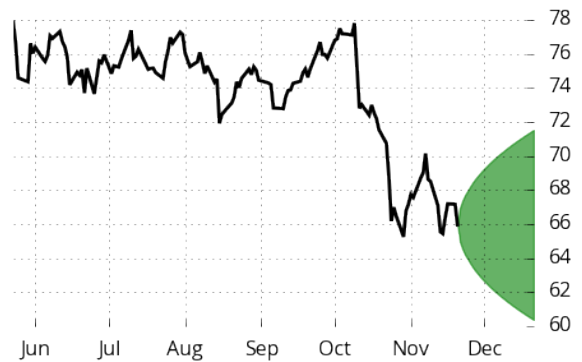
SPDR Series Trust SPDR S&P Biotech ETF  
IV: 43  
IV Rank: 92 (Extremely High)  
Estimated Liquidity: Great  
Correlation with S&P 500: 0.75

## XBI



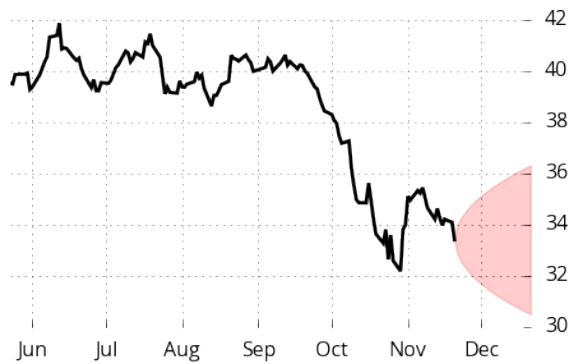
SPDR Select Sector Fund Energy Select Sector  
IV: 29  
IV Rank: 78 (High)  
Estimated Liquidity: Great  
Correlation with S&P 500: 0.72

## XLE



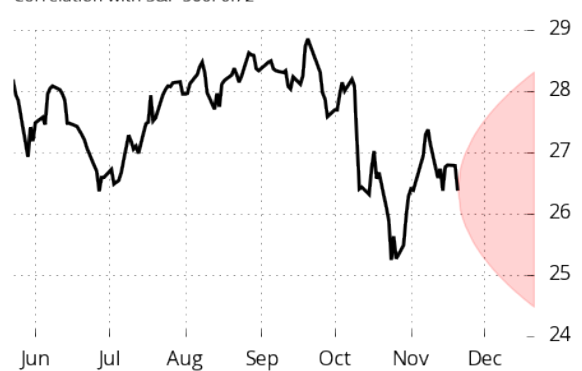
SPDR Series Trust SPDR Homebuilders ETF  
IV: 29  
IV Rank: 44 (Moderately Low)  
Estimated Liquidity: Great  
Correlation with S&P 500: 0.62

## XHB



SPDR Select Sector Fund Financial  
IV: 24  
IV Rank: 46 (Moderately Low)  
Estimated Liquidity: Great  
Correlation with S&P 500: 0.72

## XLF



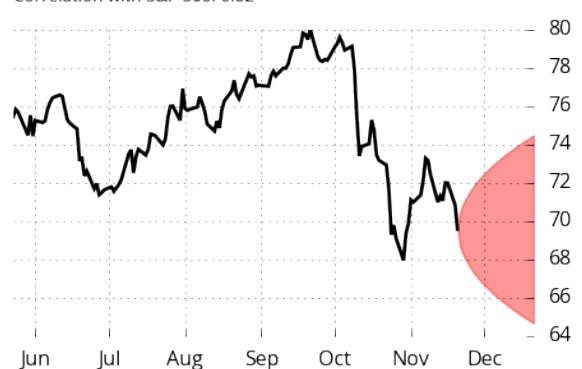
Materials Select Sector SPDR  
IV: 24  
IV Rank: 62 (Moderately High)  
Estimated Liquidity: Great  
Correlation with S&P 500: 0.78

## XLB



SPDR Select Sector Fund Industrial  
IV: 24  
IV Rank: 32 (Moderately Low)  
Estimated Liquidity: Great  
Correlation with S&P 500: 0.82

## XLI





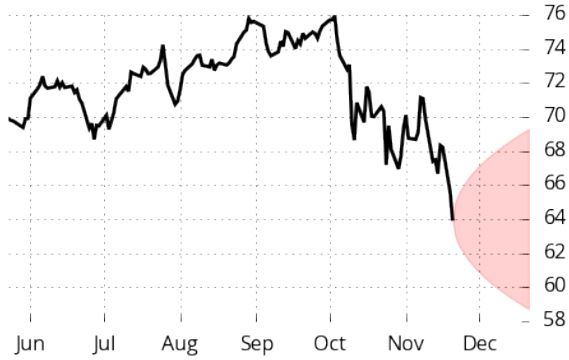
# Current ETF Watchlist



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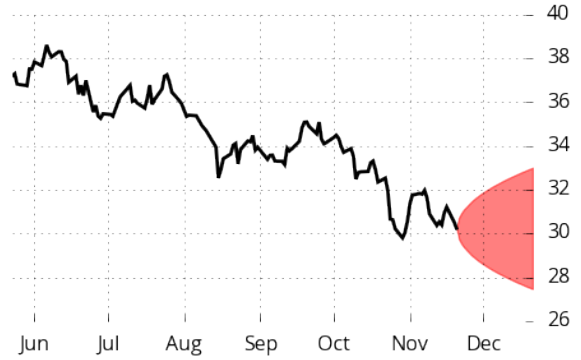
SPDR Select Sector Fund Technology  
IV: 28  
IV Rank: 45 (Moderately Low)  
Estimated Liquidity: Great  
Correlation with S&P 500: 0.89

## XLK



SPDR S&P Metals & Mining ETF  
IV: 31  
IV Rank: 27 (Moderately Low)  
Estimated Liquidity: Good  
Correlation with S&P 500: 0.58

## XME



SPDR Select Sector Fund Consumer Staples  
IV: 17  
IV Rank: 36 (Moderately Low)  
Estimated Liquidity: Great  
Correlation with S&P 500: 0.34

## XLP



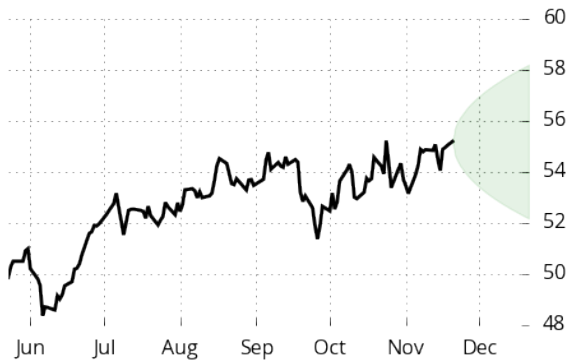
SPDR S&P Oil & Gas Explor & Product  
IV: 43  
IV Rank: 76 (High)  
Estimated Liquidity: Great  
Correlation with S&P 500: 0.71

## XOP



SPDR Select Sector Fund Utilities  
IV: 18  
IV Rank: 50 (Moderately High)  
Estimated Liquidity: Great  
Correlation with S&P 500: 0.03

## XLU



SPDR S&P Retail ETF  
IV: 29  
IV Rank: 25 (Moderately Low)  
Estimated Liquidity: Great  
Correlation with S&P 500: 0.48

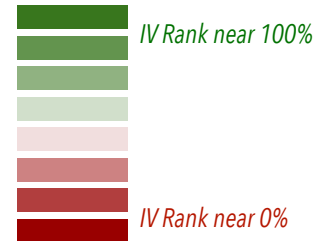
## XRT



# Reading this Report

**Expected Range Cone.** The colored cone represents a 30-day expected theoretical price range that is calculated from the options' implied volatilities. If the implied volatility is relatively high, then the market is expecting a larger price change in the underlying stock or ETF. From this we can derive the market's 1 standard deviation theoretical expectation of where prices might be in the future. In other words, the market is expecting, with a 68% theoretical probability, that prices will fall within the boundary of the cone at the end of 30 days.

**Cone Color.** The color of the cone is significant. The darker the color, the more "extreme" the implied volatility (IV) which is represented by implied volatility rank (IV Rank). This information can help you decide on a trading strategy.



## Glossary

**IV.** Implied Volatility is the estimated volatility of a security's price derived from its option price; the higher the IV, the more expensive the option and therefore the larger the expected price move. IV is an annualized number of volatility, e.g. a IV of 27 means the option's market is pricing in an annualized price range, either plus or minus, of 27%.

**IV Rank.** IV by itself doesn't tell us if the volatility is high or low - but IV Rank does. An IV Rank of 70 means that the IV is 70% between its low and high IV over the past year. The higher the IV Rank, the higher the security's IV is compared to its past year. We provide six levels to make evaluating easier:

- **Extremely High:** IV Rank between 90 and 100
- **High:** IV Rank between 75 and 90
- **Moderately High:** IV Rank between 50 and 75
- **Moderately Low:** IV Rank between 25 and 50
- **Low:** IV Rank between 10 and 25
- **Extremely Low:** IV Rank between 0 and 10

**Option Liquidity.** At tastytrade we have our own theoretical measure of option liquidity, Poor, Moderate, Good, or Great. It examines the options' bid/ask spread, open interest, and the number of strikes with non-zero bids.

**Correlation with S&P 500.** Correlation is a statistical measure of how strong a relationship two securities have with one another. A correlation of -1 means the stocks are perfectly negatively correlated (they move in opposite directions), while a correlation of +1 means the stocks are perfectly positively correlated (they move in the same direction). A correlation of 0 means there exist little relationship.

**Earnings.** The earnings date of the security. In practice we tend to see stocks have a larger amount of implied volatility (IV) nearer to earnings as the market is pricing in the fear of the upcoming earnings announcement. In parenthesis, is BTO or AMC; "Before the Open" or "After Market Closes", respectively. Upcoming earnings dates do sometimes change.

## Disclosures

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