



Cherry Picks

tastytrade's Quantitative Newsletter for Traders

March 13, 2018

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

Action is Back in the Markets.

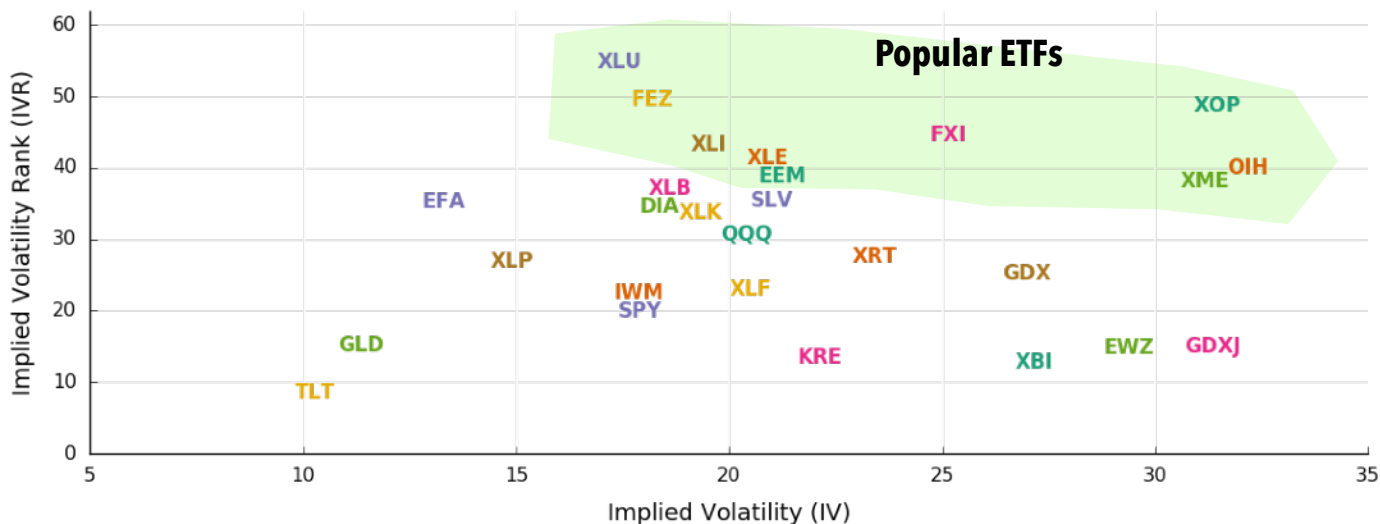
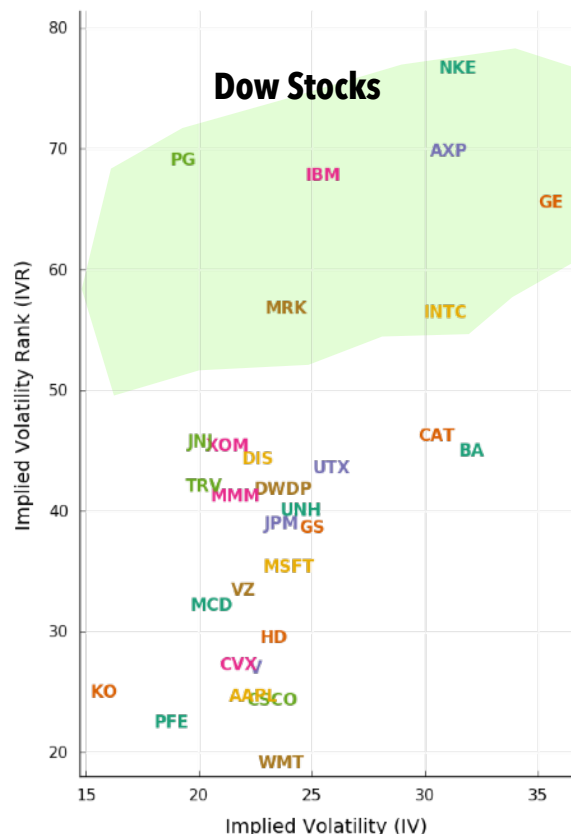


When implied volatility spiked in February – the prior probabilities suggested it would only last a few days. But it has been almost a **1.5 months** and the **VIX is still over 15**. This is ideal for sellers of options since the **return on the investment tends to be significantly higher** than at lower implied volatility numbers.

ETFs With High Relative Volatility

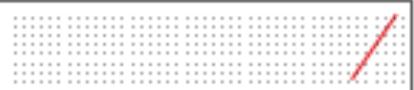
Below we have a visual of implied volatility plotted against implied volatility rank. The higher up on the graphic, the higher the relative volatility; the further on the right, the greater the premium is priced. Everything else equal, we'd like to have ETFs that are in the top right of the graphic.

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Market Statistics



1 Month Returns of Futures

/NQ 10.2%	/NG 9.4%	/RTY 8.0%	/ZC 7.0%	/ZW 6.4%	/ES 5.5%	/ZS 4.6%
/CL 3.0%	/YM 3.0%	/6J 1.5%	/6B 0.9%	/6A 0.6%	/6E 0.5%	/SI 0.2%
/GC -0.0%	/UB -0.1%	/ZB -0.2%	/ZT -0.4%	/ZF -0.4%	/ZN -0.4%	/6C -1.8%

1 Month Returns of Dow Stocks

INTC 16.5%	CSCO 13.1%	AAPL 12.2%	MSFT 8.8%	GS 8.0%	PFE 6.1%
IBM 6.0%	JPM 5.7%	MMM 5.1%	V 5.1%	UTX 3.8%	CVX 3.3%
TRV 3.1%	AXP 3.0%	JNJ 3.0%	CAT 2.4%	NKE 2.1%	DIS 1.8%
KO 1.7%	BA 0.4%	DWDP 0.1%	MRK -0.0%	UNH -0.8%	XOM -1.3%
PG -1.6%	VZ -1.8%	HD -2.2%	GE -2.3%	MCD -2.5%	WMT -11.0%

1 Month Returns of Popular ETFs

QQQ 10.0%	XLK 9.9%	XBI 9.5%	IWM 8.0%	KRE 7.4%	EEM 6.3%	EWZ 6.1%	XLF 5.8%	FXI 5.7%
XOP 5.5%	SPY 5.4%	XME 5.2%	XLI 3.6%	OIH 3.5%	XLB 3.2%	DIA 2.8%	EFA 2.1%	FEZ 1.9%
XLU 1.8%	XRT 1.6%	XLE 1.4%	GDXJ 0.9%	XLP 0.8%	TLT 0.4%	SLV 0.4%	GLD 0.3%	GDX -0.9%

1 Month Returns of Utilities

NRG 22.1%	SCG 9.6%	PCG 8.3%	AWK 5.7%	FE 5.0%	AES 4.9%	NEE 4.1%
ETR 4.0%	SRE 3.6%	CNP 3.0%	LNT 2.8%	AEP 2.1%	EXC 2.0%	CMS 0.9%
DUK 0.6%	NI 0.6%	PNW 0.5%	PEG 0.4%	EIX 0.4%	XEL 0.2%	WEC 0.1%
DTE 0.0%	ES -0.4%	AEE -1.2%	ED -1.6%	SO -1.6%	D -2.7%	PPL -8.2%

1 Month Returns of tastytrade Watchlist

CMG 22.6%	X 22.5%	BIDU 15.6%	HPQ 14.9%	NFLX 14.0%	TSLA 13.2%	FCX 11.2%	AAPL 10.0%	AMZN 9.8%	BABA 9.4%	GOOG 8.7%
USO 8.2%	UAL 8.0%	FXI 7.8%	EWZ 7.7%	CAT 7.5%	QQQ 7.3%	GS 7.1%	MSFT 7.1%	ASHR 7.1%	COST 6.5%	PCLN 6.5%
EEM 6.4%	ORCL 6.3%	DIS 6.2%	BA 5.7%	CSX 5.7%	XLF 5.3%	XLI 5.0%	FB 4.8%	XOP 4.7%	IBM 4.7%	SPY 4.7%
RUT 4.6%	IWM 4.6%	DIA 4.4%	XLV 4.3%	C 3.9%	TWTR 3.9%	EBAY 3.6%	UNG 3.3%	XLB 3.3%	XOM 3.2%	SBUX 3.2%
XRT 3.1%	OIH 2.7%	XLU 2.6%	GDXJ 2.5%	HD 2.4%	IYR 2.2%	GILD 2.1%	XLE 2.1%	RIG 1.7%	XHB 1.4%	GDX 1.0%
GLD 0.9%	SLV 0.7%	TBT 0.5%	FXE 0.2%	TLT -0.2%	GG -0.4%	GM -1.1%	P -3.2%	VXX -19.2%	UVXY -36.2%	VIX -38.3%



Upcoming Earnings

Symbol	Description	Expected Report Date	Time of Day	Weekly Options	In Dow?	In S&P 500?	In Russell 2000?	In tastytrade Watchlist?
DDD	3D Systems	Wed Mar-14	After Close	Yes	-	-	Yes	-
AVGO	Broadcom Limiteds	Thu Mar-15	After Close	Yes	-	Yes	-	-
ADBE	Adobe Systems	Thu Mar-15	After Close	Yes	-	Yes	-	-
TIF	Tiffany & Co.	Fri Mar-16	Before Open	Yes	-	Yes	-	-
ORCL	Oracle	Mon Mar-19	After Close	Yes	-	Yes	-	Yes
FDX	FedEx	Tue Mar-20	After Close	Yes	-	Yes	-	-
KBH	KB Home	Thu Mar-22	After Close	-	-	-	Yes	-
NKE	Nike	Thu Mar-22	After Close	Yes	Yes	Yes	-	-
MU	Micron Technology	Thu Mar-22	After Close	Yes	-	Yes	-	-

Historical Earnings Moves for Select Stocks

It is often nice to examine historical moves in stocks around earnings. At the very least, it provides some context.

Historical Price Move From Immediately Before Earnings to that Friday's Expiration											
	4th Q	3rd Q	2nd Q	1st Q	4th Q	3rd Q	2nd Q	1st Q	4th Q	3rd Q	2nd Q
	2017	2017	2017	2017	2016	2016	2016	2016	2015	2015	2015
ADBE	1%	-5%	3%	4%	-1%	7%	-8%	4%	3%	1%	0%
AVGO	-2%	-4%	8%	1%	5%	-2%	5%	6%	12%	10%	4%
DDD	-27%	-21%	2%	-14%	-5%	21%	-9%	0%	-2%	15%	-8%
FDX	3%	2%	3%	-2%	-3%	7%	-8%	13%	-1%	-6%	-3%
KBH	8%	9%	5%	2%	-2%	5%	2%	6%	-15%	0%	9%
MU	0%	15%	-5%	7%	13%	-1%	-9%	5%	-1%	8%	-18%
NKE	-2%	-3%	11%	-3%	0%	-5%	5%	-5%	-4%	9%	4%
ORCL	-4%	-8%	10%	6%	-4%	-5%	3%	7%	-7%	-5%	-7%
TIF	3%	-1%	-7%	3%	4%	7%	-2%	3%	4%	-2%	10%

Stocks and ETFs with an **upcoming dividend**.

In the money short call options are the only options at risk of additional early assignment due to the dividend. If the extrinsic value of the in the money short call is less than the dividend, the option is at (a greater than average) risk of being assigned.

Symbol	Description	Ex-Dividend Date	Dividend Per Share	In Dow?	In S&P 500?	In Russell 2000?	In tastytrade Watchlist?
GG	Goldcorp	Wed, Mar 14	0.02	-	-	-	Yes
M	Macy's Inc	Wed, Mar 14	0.377	-	Yes	-	-
DPZ	Domino's Pizza Inc	Wed, Mar 14	0.55	-	-	-	-
KO	Coca-Cola	Wed, Mar 14	0.39	Yes	Yes	-	-
MRK	Merck & (new)	Wed, Mar 14	0.48	Yes	Yes	-	-
GILD	Gilead Sciences	Thu, Mar 15	0.57	-	Yes	-	Yes
BBBY	Bed Bath & Beyond	Thu, Mar 15	0.15	-	Yes	-	-
BBY	Best Buy Co.	Wed, Mar 21	0.45	-	Yes	-	-
LVS	Las Vegas Sands Corp.	Wed, Mar 21	0.75	-	-	-	-

Note: SPY, DIA, MDY, XLB, XLI, XLK, XLV, XLP, XLY, XLE, XLF, XLU, XBI, XHB, XME, XOP, KRE, XRT, SDY all have dividends on Friday, March 16



Shows From the Research Team The Past Few Days:

Date	Segment	Title	Link
Mon, Mar 12	Market Measures	Diversification Options in High IV Rank	LINK
Mon, Mar 12	Best Practices	The Speed of Delta	LINK
Fri, Mar 09	Market Measures	Trade Defense: Exit or Do Nothing?	LINK
Fri, Mar 09	Resize & Analyze	Week of March 5th	LINK
Fri, Mar 09	Closing the Gap - Futures Edition	Soybeans & Corn: It's Planting Time	LINK
Thu, Mar 08	Market Measures	IV Rank and Stock Movement	LINK
Thu, Mar 08	Options Jive	Adjusting Probabilities by Rolling	LINK
Thu, Mar 08	Trades From the Research Team LIVE	Trades From the Research Team LIVE	LINK
Wed, Mar 07	Market Measures	Market Premium: Historical & Current	LINK
Wed, Mar 07	Options Jive	Is There a Trade? Week of March 5th	LINK
Wed, Mar 07	tasty BITES	How Can Iron Condors Make Money?	LINK
Tue, Mar 06	Market Measures	Managing Winners Varying Durations	LINK
Tue, Mar 06	Options Jive	Market Corrections	LINK
Tue, Mar 06	Best Practices	Delta Review	LINK
Mon, Mar 05	Market Measures	GDP Growth Compared to the Market	LINK
Mon, Mar 05	The Skinny on Options: Abstract Applications	The Central Limit Theorem	LINK
Mon, Mar 05	tasty Extras	A Special Announcement	LINK
Fri, Mar 02	Market Measures	Overstated Implied Volatility in Stocks	LINK
Fri, Mar 02	Closing the Gap - Futures Edition	Currencies & Commodities on the Move	LINK
Thu, Mar 01	tasty Extras	Using the tastyworks Web Platform	LINK
Thu, Mar 01	Market Measures	Is Delta Neutral Worth It?	LINK
Thu, Mar 01	Options Jive	A Tale of Two Volatilities	LINK
Thu, Mar 01	Trades From the Research Team LIVE	Trades From the Research Team LIVE	LINK
Wed, Feb 28	Market Measures	Short Calls: Fading the Highs	LINK
Wed, Feb 28	Options Jive	Is There a Trade? Week of Feb 25th	LINK
Wed, Feb 28	Options Jive	What's Tom Trading?	LINK
Tue, Feb 27	Market Measures	Managing Earlier - Volatility	LINK
Tue, Feb 27	The Skinny on Options: Abstract Applications	The Origin of Beta	LINK
Tue, Feb 27	tasty BITES	Target 45	LINK
Mon, Feb 26	Market Measures	Doubling Down on Jade Lizards	LINK
Mon, Feb 26	Options Jive	Understanding the Lizards	LINK
Mon, Feb 26	Best Practices	Skew and the Lizards	LINK



Current Market Outlook



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 500
IV: 17
IV Rank: 19 (Low)
Estimated Liquidity: Great

SPY



iShares 20+ Year Treasury Bond ETF
IV: 10
IV Rank: 8 (Extremely Low)
Estimated Liquidity: Great
Correlation with S&P 500: -0.01

TLT



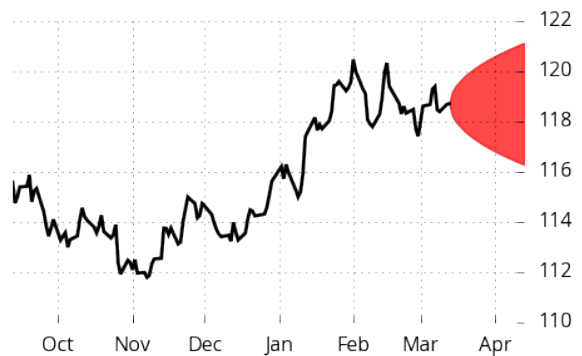
iShares Russell 2000 ETF
IV: 17
IV Rank: 21 (Low)
Estimated Liquidity: Great
Correlation with S&P 500: 0.83

IWM



Guggenheim CurrencyShares Euro Currency Trust
IV: 7
IV Rank: 15 (Low)
Estimated Liquidity: Good
Correlation with S&P 500: 0.19

FXE



PowerShares QQQ Trust, Series 1
IV: 20
IV Rank: 30 (Moderately Low)
Estimated Liquidity: Great
Correlation with S&P 500: 0.92

QQQ



SPDR Dow Jones Industrial Average ETF
IV: 18
IV Rank: 34 (Moderately Low)
Estimated Liquidity: Good
Correlation with S&P 500: 0.92

DIA





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 Select Sector Fund Utilities
IV: 17
IV Rank: 54 (Moderately High)
Estimated Liquidity: Great
Correlation with S&P 500: 0.38

XLU



SPDR Series Trust SPDR S&P Biotech ETF
IV: 27
IV Rank: 12 (Low)
Estimated Liquidity: Good
Correlation with S&P 500: 0.63

XBI



SPDR Select Sector Fund Technology
IV: 19
IV Rank: 33 (Moderately Low)
Estimated Liquidity: Good
Correlation with S&P 500: 0.93

XLK



iShares MSCI Emerging Index Fund
IV: 21
IV Rank: 35 (Moderately Low)
Estimated Liquidity: Great
Correlation with S&P 500: 0.85

EEM



SPDR DJ Euro STOXX 50 Etf
IV: 18
IV Rank: 49 (Moderately Low)
Estimated Liquidity: Good
Correlation with S&P 500: 0.84

FEZ



iShares Inc iShares MSCI Brazil ETF
IV: 29
IV Rank: 14 (Low)
Estimated Liquidity: Great
Correlation with S&P 500: 0.7

EWZ





Current Stock 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.

American Express
IV: 30
IV Rank: 69 (Moderately High)
Estimated Liquidity: Good
Correlation with S&P 500: 0.66
Earnings: Wed, Apr 18, 2018

AXP



Netflix,
IV: 48
IV Rank: 97 (Extremely High)
Estimated Liquidity: Great
Correlation with S&P 500: 0.52
Earnings: Mon, Apr 16, 2018

NFLX



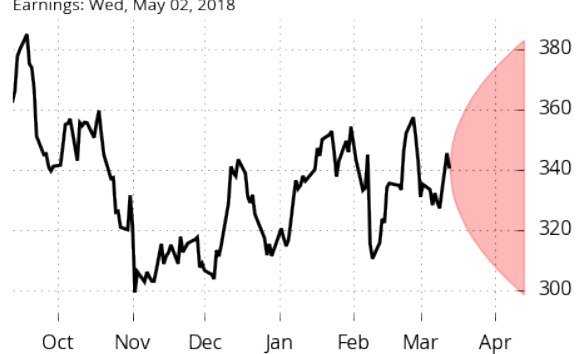
United States Steel
IV: 50
IV Rank: 27 (Moderately Low)
Estimated Liquidity: Good
Correlation with S&P 500: 0.41
Earnings: Tue, Apr 24, 2018

X



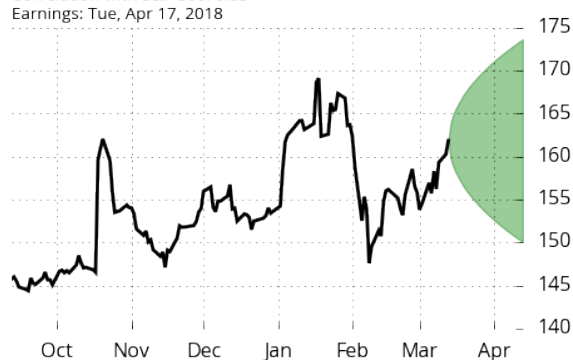
Tesla,
IV: 42
IV Rank: 40 (Moderately Low)
Estimated Liquidity: Good
Correlation with S&P 500: 0.39
Earnings: Wed, May 02, 2018

TSLA



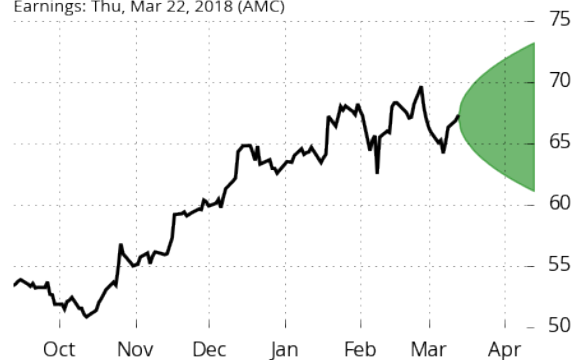
International Business Machines
IV: 25
IV Rank: 67 (Moderately High)
Estimated Liquidity: Great
Correlation with S&P 500: 0.65
Earnings: Tue, Apr 17, 2018

IBM



Nike
IV: 30
IV Rank: 76 (High)
Estimated Liquidity: Great
Correlation with S&P 500: 0.57
Earnings: Thu, Mar 22, 2018 (AMC)

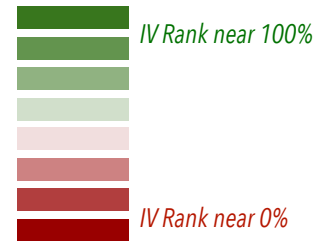
NKE



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

Options involve risk and are not suitable for all investors. Please read Characteristics and Risks of Standardized Options before deciding to invest in options: <https://www.theocc.com/components/docs/riskstoc.pdf>

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