



# GLOBAL VOLATILITY & POSITIONING TRENDS



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# **FACTOR EXPOSURE TRENDS**

# CHANGING OF THE GUARD IN “GROWTH” EXPOSURES?

RUSSELL 1000 “GROWTH” INDEX VOLATILITY EXPECTATIONS ARE DRASTICALLY EXPANDING

In this chart we look at the cost of hedging the Russell 1000 “Growth” Index (ETF: IWD) relative to the Russell 1000 “Value” Index (ETF: IVD) for the next 3 months (at-the-money)

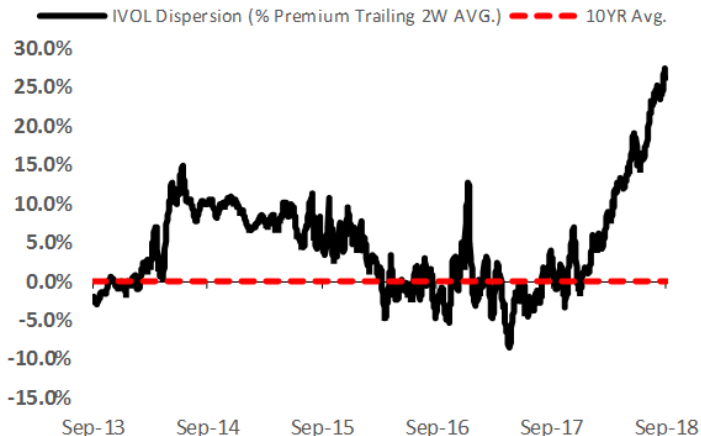
The time series is constructed by looking at 3-mth implied volatility in R1K “growth” as a ratio of 3-mth implied volatility in “value”.

**Takeaway:** Realized volatility and volatility expectations (as shown in this chart) in “growth” as a style continue to trend higher which does not bode well for incremental flows/demand absent of your view on the cycle.

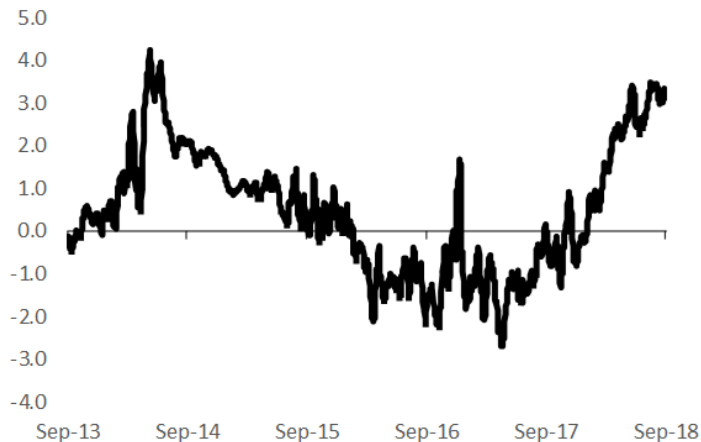
IMPLIED DISPERSION: % VOLATILITY PREMIUM TO BENCHMARK

TICKER: IWF US Equity  
BENCH: IWD US Equity  
VOL FIELD: 3MO\_PUT\_IMP\_VOL

IVOL Premium % to Bench (2W Avg)



IVOL Dispersion (3Yr Z-Score)



Data Source: CBOE, CME, Bloomberg

# CHANGING OF THE GUARD IN “GROWTH” EXPOSURES?

WE SEE THE SAME TREND AT THE SMALL-CAP LEVEL: RUSSELL 2000 “GROWTH” INDEX HEDGING COSTS CONTINUE TO TREND HIGHER AGAINST THE COST OF HEDGING THE RUSSELL 2000 “VALUE” INDEX.

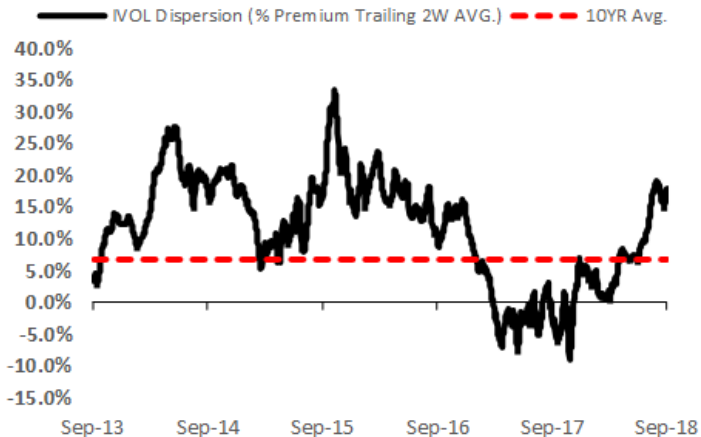
We use the same methodology here to look at relative volatility and hedging costs in the Russell 2000.

**Takeaway:** The low volatility in Russell “value” indices has a heavy interest rates component right now because of its natural heavy weighting to the financials sector due to constructing “value” through P/B ratios. And, we know that interest rate volatility expectations continue to hover near all-time lows across the volatility term structure.

## IMPLIED DISPERSION: % VOLATILITY PREMIUM TO BENCHMARK

TICKER:	IWO US Equity
BENCH:	IWN US Equity
VOL FIELD:	3MO_PUT_IMP_VOL

### IVOL Premium % to Bench (2W Avg)



### IVOL Dispersion (3Yr Z-Score)



Data Source: CBOE, CME, Bloomberg

# "GROWTH" OUTPERFORMANCE IS SUCKING WIND

"GROWTH" AND "MOMENTUM" STRATEGIES ARE BEGINNING TO SUCK WIND ON A TRENDING BASIS EVEN THOUGH THEY STILL HAVE A HEFTY LEAD IN THE YTD RACE

We closely track relative performance for five key factor portfolio buckets, each with 5 different indices/strategies to capture said Style while focusing on the large and mid-cap space.

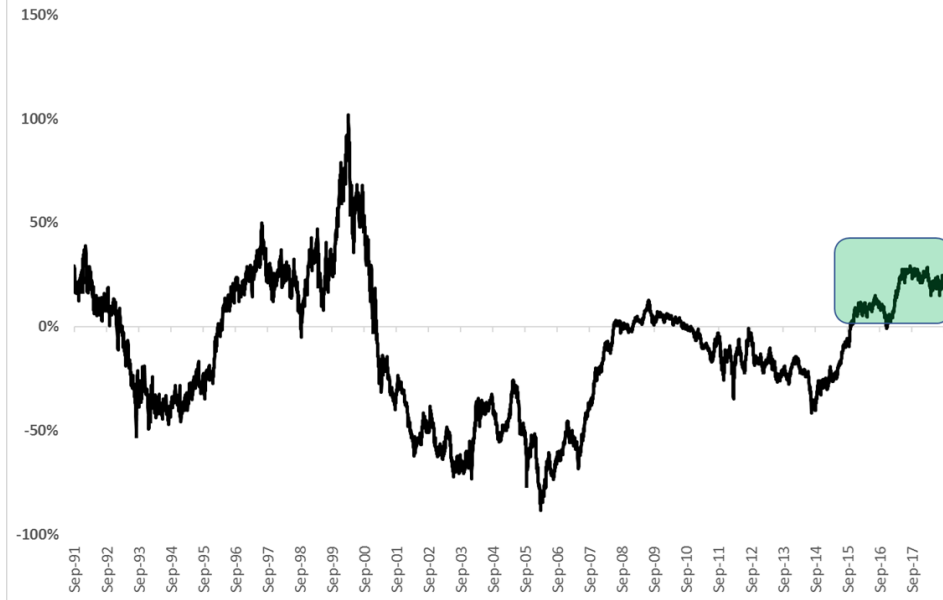
	SECURITY	TICKER	PRICE (\$)	DD %	5D %	1Mth %	3Mth %	6Mth %	1Yr %	To-Date Returns	
										MTD %	YTD %
VALUE	iShares Russell 1000 Value ETF	IWD US Equity	\$129.51	0.12%	1.50%	2.12%	6.37%	11.34%	11.99%	1.90%	5.37%
	Vanguard Value ETF	VTV US Equity	\$113.26	0.15%	1.55%	2.66%	7.96%	13.40%	16.26%	2.29%	7.79%
	Alpha Architect Quantitative Value ETF	QVAL US Equity	\$31.72	-0.09%	1.02%	-1.45%	0.03%	8.09%	21.06%	-1.61%	4.05%
	Invesco S&P 500 Pure Value ETF	RPV US Equity	\$70.36	0.21%	2.08%	1.86%	5.27%	12.88%	18.53%	1.98%	7.74%
	iShares Edge MSCI USA Value ETF	VLUE US Equity	\$89.23	-0.09%	1.59%	1.69%	5.63%	12.19%	18.74%	0.81%	7.92%
MOMENTUM	iShares Edge MSCI USA Momentum ETF	MTUM US Equity	\$118.33	-0.10%	1.21%	1.66%	5.84%	13.91%	26.14%	0.13%	15.39%
	Invesco DWA Momentum ETF	PDP US Equity	\$59.15	-0.42%	0.07%	0.80%	4.30%	13.94%	22.07%	-1.11%	14.65%
	Alpha Architect Quantitative Momentum ETF	QMOM US Equity	\$33.36	0.43%	-0.01%	0.61%	4.16%	12.02%	24.91%	-1.52%	16.65%
	SPDR Russell 1000 Momentum ETF	ONEO US Equity	\$76.89	-0.14%	0.90%	0.73%	3.96%	9.31%	15.64%	0.15%	6.84%
	Fidelity Momentum Factor ETF	FDMO US Equity	\$35.06	-0.21%	0.74%	1.13%	5.26%	12.95%	23.40%	-0.54%	12.99%
GROWTH	iShares Russell 1000 Growth ETF	IWF US Equity	\$155.37	-0.30%	1.05%	1.55%	6.56%	16.35%	26.13%	-0.09%	16.05%
	Nasdaq 100 Index	QQQ US Equity	\$183.71	-0.55%	1.49%	0.85%	4.97%	16.35%	28.27%	-1.40%	18.61%
	Invesco S&P 500 Pure Growth ETF	RPG US Equity	\$120.02	-0.22%	1.11%	0.77%	2.54%	10.92%	21.66%	-0.67%	14.80%
	Vanguard Growth ETF	VUG US Equity	\$160.30	-0.31%	1.17%	1.24%	5.29%	14.82%	22.69%	-0.27%	14.57%
	iShares North American Tech-Software ETF	IGV US Equity	\$200.70	-0.18%	-0.11%	0.42%	8.14%	19.24%	37.36%	-0.07%	29.89%
LOW VOL & YIELD	iShares Edge MSCI Min Vol USA ETF	USMV US Equity	\$57.58	0.23%	0.61%	2.07%	7.99%	14.19%	16.51%	1.75%	10.19%
	Invesco S&P 500 Low Volatility ETF	SPLV US Equity	\$50.29	0.10%	0.24%	1.54%	6.79%	11.39%	12.23%	1.19%	7.00%
	Invesco S&P 500 High-Div Low-Vol ETF	SPHD US Equity	\$42.34	0.31%	0.54%	1.43%	4.75%	13.13%	7.84%	1.89%	2.90%
	Vanguard High Dividend Yield ETF	VYM US Equity	\$89.34	0.22%	1.48%	2.17%	6.53%	12.03%	13.21%	2.21%	5.89%
	iShares Select Dividend ETF	DVY US Equity	\$102.23	0.25%	0.10%	0.80%	4.54%	11.44%	12.71%	1.21%	5.44%
QUALITY	iShares Edge MSCI USA Quality Factor ETF	QUAL US Equity	\$91.26	0.22%	1.45%	2.79%	8.07%	13.74%	20.58%	1.65%	11.09%
	Invesco S&P 500 Quality Factor ETF	SPHQ US Equity	\$32.85	0.21%	1.96%	3.07%	8.10%	13.66%	16.43%	1.96%	9.16%
	Fidelity U.S. Quality Factor ETF	FQAL US Equity	\$34.88	0.08%	1.32%	1.65%	6.83%	14.13%	19.41%	0.82%	10.96%
	Barron's 400 ETF	BFOR US Equity	\$45.52	-0.26%	0.33%	-0.74%	3.57%	11.51%	18.17%	-1.01%	9.48%
	Vanguard U.S. Quality Factor ETF	VFQY US Equity	\$86.47	-0.10%	0.93%	0.35%	4.07%	15.48%	NA	-0.48%	NA

Data Source: Bloomberg

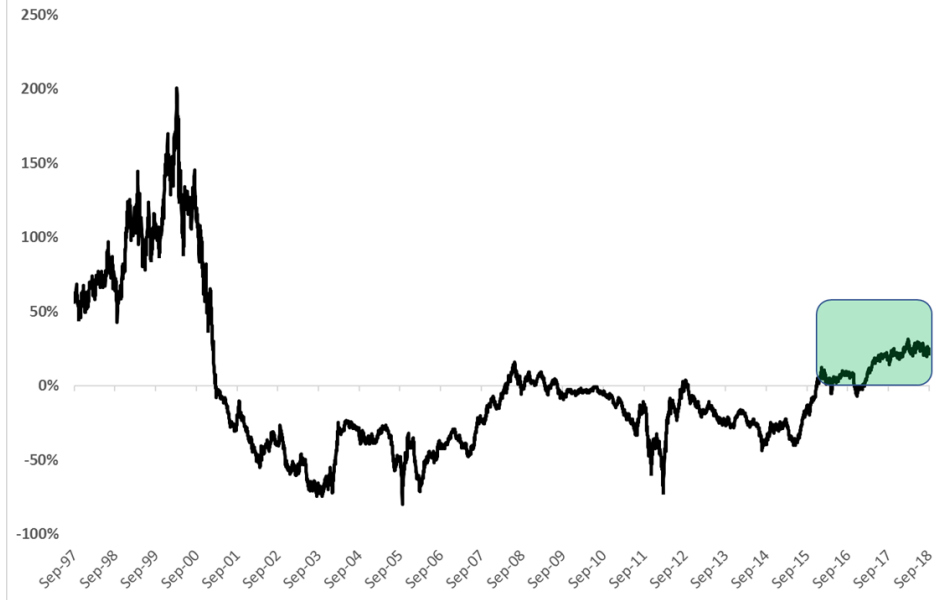
# THE QUESTION WE'RE REALLY TRYING TO ANSWER...

CAN QUAD 4 IN Q4 BE THE STRAW THAT BREAKS THE CAMEL'S BACK FOR LONGSTANDING GROWTH AND MOMENTUM OUTPERFORMANCE? GIP-MODELING HISTORY SUGGEST THE ANSWER IS **"YES."**

Rolling 3YR Cumulative Total Return % (R3K Growth over RAFI U.S. Value Index)

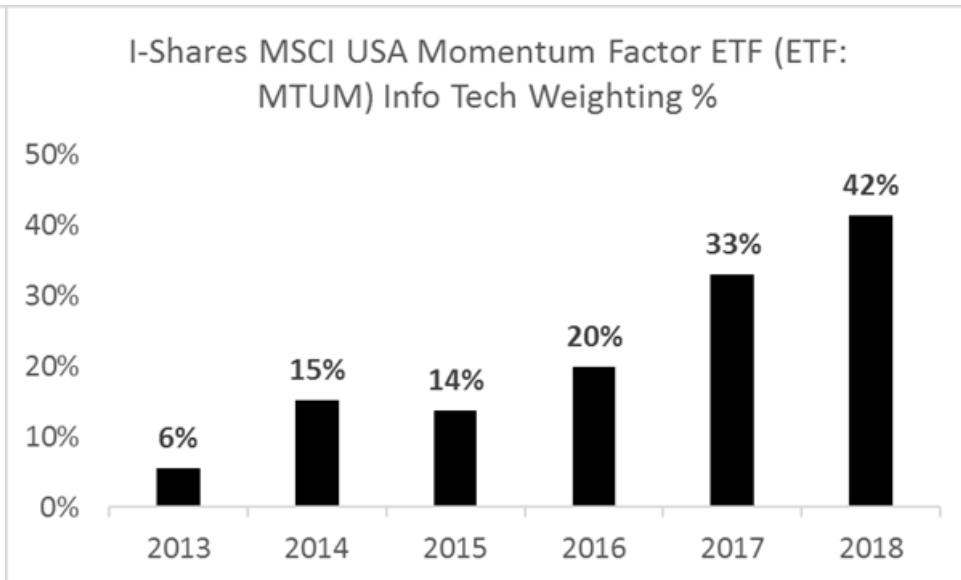
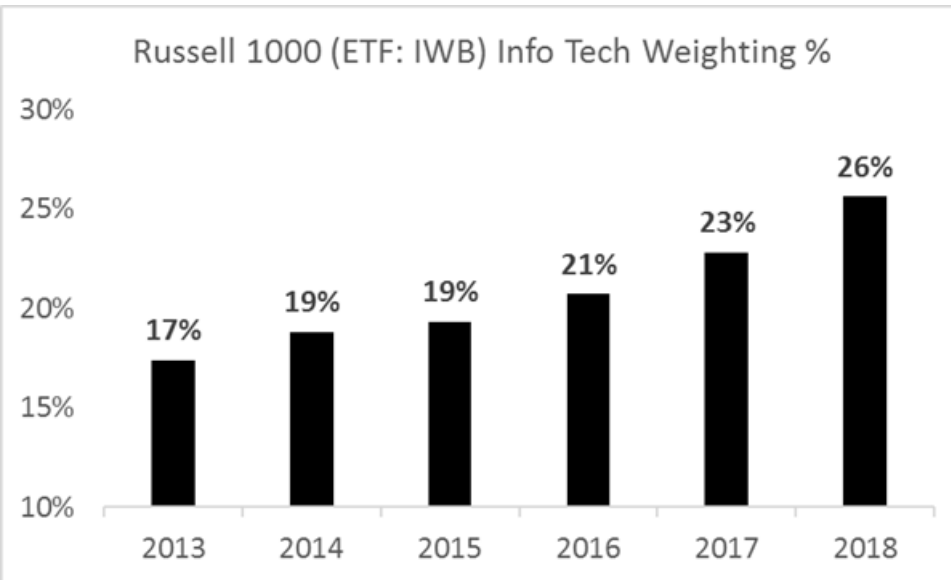


Rolling 3YR Cumulative Total Return % (S&P 500 Momentum Index over RAFI U.S. Value Index)



# ...BECAUSE IT WILL LIKELY HAVE SECTOR IMPLICATIONS

FACTOR PORTFOLIOS WILL NATURALLY BE LOADED UP ON DIFFERENT SECTORS AT DIFFERENT PARTS OF THE CYCLE. RIGHT NOW TECH IS A BIG PIECE OF MOST “GROWTH” AND “MOMENTUM” CONSTRUCTIONS



# **INTEREST RATE EXPECTATIONS**

# INTEREST RATE VOLATILITY EXPECTATIONS = ALL-TIME LOWS

THROUGHOUT THIS SECTION, WE WILL VISUALLY SHOW THAT THE LOWEST TRENDING VOLATILITY EXPECTATIONS ARE IN DIRECT RATE-SENSITIVITIES (EYEING THE “PERCENTILE” COLUMNS BELOW IS A GOOD SPOT TO FIND GLOBAL MACRO CONTEXT.

Note that our two topical call-outs this month are closely related:

- 1) Factor Exposure Trends
- 2) Interest Rate Volatility Expectations

For example, interest rate volatility trends are a piece of the relative widening in volatility expectations for Russell “growth” over “value” indices because of the heavy weightings to industries like banking and insurance for the Russell “value” indices.

GLOBAL VOLATILITY INDICES							
EQUITIES	INDEX	INDEX Level	WW%	MM%	3M%	5Yr Percentile	10Yr Percentile
CBOE S&P 500 Volatility Index	VIX Index	11.68	-3.23%	-2.59%	-32.60%	20.7%	10.4%
CBOE S&P 500 Short-Term Volatility Index	VSTN Index*	10.36	13.72%	6.15%	-46.07%	27.0%	27.0%
CBOE Nasdaq 100 Volatility Index	VXN Index	16.84	4.47%	11.08%	-23.25%	60.6%	39.2%
CBOE Russell 2000 Volatility Index	RVX Index	13.84	1.47%	-0.14%	-27.20%	2.7%	1.3%
CBOE Dow Jones Industrial Avg. Volatility Index	VXD Index	12.41	-3.80%	-1.12%	-29.93%	31.3%	18.7%
Deutsche Borse Euro Stoxx 50 Volatility Index	V2X Index	12.82	-7.78%	-2.83%	-28.30%	7.1%	3.5%
Euronext FTSE 100 Volatility Index	VFTSE Index	11.36	-5.06%	5.16%	-26.92%	22.3%	11.5%
Euronext CAC 40 Volatility Index	VCAC Index	12.15	-4.65%	-4.53%	-26.15%	9.0%	4.5%
OSE Nikkei Stock Avg. Volatility Index	VNKY Index	16.17	-1.28%	11.13%	-13.30%	18.1%	9.2%
HSE Hang Seng Volatility Index	VHSI Index	19.77	4.05%	9.96%	-3.23%	69.1%	53.0%
KSE KOSPI 200 Volatility Index	VKOSPI Index	11.09	4.03%	-4.48%	-28.36%	7.6%	3.8%
CBOE Emerging Markets ETF Volatility Index	VXEEM Index*	19.11	-4.40%	2.80%	-9.17%	39.1%	30.1%
CBOE Brazil ETF Volatility Index	VXEWZ Index*	45.74	-15.97%	4.91%	32.27%	87.0%	89.5%
NSE Nifty 50 Volatility Index	INVIXN Index	16.53	19.41%	33.23%	31.37%	66.4%	40.2%
COMMODITIES		INDEX Level	WW%	MM%	3M%	5Yr Percentile	10Yr Percentile
CBOE Crude Oil ETF Volatility Index	OVX Index	26.15	-0.95%	12.18%	0.19%	31.9%	22.7%
CBOE Gold ETF Volatility Index	GVZ Index*	10.76	-0.74%	-8.11%	-0.65%	3.9%	1.9%
CBOE Silver ETF Volatility Index	VXSLV Index*	19.41	-2.07%	0.67%	7.12%	16.8%	11.2%
COMEX Copper 3Mth IVOL Index	IVOLCCOP Index	21.17	1.58%	1.94%	23.88%	68.2%	41.1%
CME Corn 3Mth IVOL Index	IVOLCORN Index	17.66	9.46%	2.43%	-31.28%	12.6%	6.3%
CME Soybeans 3Mth IVOL Index	IVOLSOYB Index	16.86	-1.15%	-12.63%	-25.17%	24.9%	12.4%
CURRENCIES		INDEX Level	WW%	MM%	3M%	5Yr Percentile	10Yr Percentile
Deutsche Bank FX Volatility Index	CVIX Index	7.58	0.26%	-1.30%	2.29%	30.2%	16.2%
CBOE/CME Euro Volatility Index	EUPIX Index	7.38	2.36%	-3.78%	-10.55%	30.9%	16.3%
CBOE/CME Yen Volatility Index	JYVIX Index	7.33	0.69%	1.38%	-12.53%	11.9%	7.3%
CBOE/CME Pound Volatility Index	BPVIX Index	10.16	9.72%	24.82%	28.28%	80.2%	62.6%
FIXED INCOME		INDEX Level	WW%	MM%	3M%	5Yr Percentile	10Yr Percentile
CBOE CBOT 10Yr Treasury Note Volatility Index	TYVIX Index	3.41	7.91%	-2.85%	-14.96%	0.7%	0.3%
Merrill Lynch Treasury Option Volatility Estimate Index	MOVE Index	48.83	2.91%	-0.66%	-7.94%	6.9%	3.4%
CBOE 20+Yr Treasury Bond ETF Volatility Index	VXTLT Index	9.78	8.55%	15.19%	1.35%	9.3%	4.6%
CBOE 7-10Yr Treasury Note ETF Volatility Index	VXIEF Index**	4.82	0.21%	0.21%	3.66%	18.9%	18.9%
CBOE High-Yield Corporate Bond ETF Volatility Index	VXHYG Index**	4.22	-14.92%	-12.63%	-20.83%	0.3%	0.3%
Note: *Denotes Absense of 10Yrs of data; **Denotes Absense of 5Yrs of data							
Data Source: CBOE, CME, Bloomberg							

# GLOBAL MACRO VOLATILITY HEATMAP: RED IS MOSTLY CONCENTRATED IN RATE-SENSITIVITIES

TIME WINDOW SETTING: VOLATILITY_30D PUT_IMP_VOL_30D	TOTAL RETURN IVOL PREMIUM/DISCOUNT								REALIZED VOLATILITY TRENDS			IMPLIED VOLATILITY TRENDS		
	TICKER	PERFORMANCE	IVOL PREM %	Yesterday	1W Ago	1M Ago	TTM Z-Score	3Yr Z-Score	RVOL	PERCENTILE	IVOL	PERCENTILE		
		YTD %	IVOL / RVOL						CURRENT		MM %		10YR	CURRENT
US EQUITIES														
		CURRENT												
Consumer Discretionary Sector SPDR ETF	XLY US EQUITY	19.49%	16%	16%	55%	25%	-0.1	0.0	10.8	20%	23%	12.5	11%	21%
Power Shares QQQ Trust ETF	QQQ US EQUITY	18.61%	25%	25%	49%	5%	0.5	0.4	11.7	-4%	23%	14.5	14%	35%
Technology Sector SPDR ETF	XLK US EQUITY	17.85%	33%	33%	50%	-1%	0.6	0.7	11.0	-12%	19%	14.6	18%	40%
Health Care Sector SPDR ETF	XLV US EQUITY	15.29%	38%	38%	57%	41%	1.0	1.0	7.2	-4%	2%	9.9	-7%	3%
I-Shares Russell 2000 ETF	IWM US EQUITY	12.44%	22%	22%	41%	-3%	0.3	0.7	9.4	-18%	2%	11.4	3%	1%
SPDR S&P 500 ETF Trust	SPY US EQUITY	10.85%	21%	21%	34%	12%	0.3	0.3	7.1	-3%	8%	8.5	5%	7%
Industrials Sector SPDR ETF	XLI US EQUITY	7.08%	15%	15%	28%	-5%	0.2	0.2	8.8	-33%	5%	10.2	-18%	3%
Energy Sector SPDR ETF	XLE US EQUITY	6.11%	-7%	-7%	4%	-8%	-0.5	-0.5	15.3	-5%	25%	14.2	-3%	9%
Financials Sector SPDR ETF	XLF US EQUITY	4.25%	24%	24%	33%	14%	0.4	0.6	11.3	-4%	10%	14.0	5%	16%
Utilities Sector SPDR ETF	XLU US EQUITY	3.32%	8%	8%	28%	12%	0.2	0.1	11.9	18%	34%	12.9	15%	36%
Vanguard Real Estate REIT ETF	VNQ US EQUITY	3.06%	-2%	-2%	8%	-13%	-0.2	-0.2	10.7	-6%	16%	10.5	6%	8%
Materials Sector SPDR ETF	XLB US EQUITY	1.38%	-2%	-2%	7%	-6%	-0.3	-0.4	12.4	-9%	22%	12.2	-5%	8%
Consumer Staples Sector SPDR ETF	XLP US EQUITY	-1.31%	7%	7%	12%	-1%	0.0	-0.1	9.4	-9%	30%	10.0	-2%	20%
INTERNATIONAL EQUITIES														
I-Shares MSCI Japan ETF	EWJ US EQUITY	0.97%	-7%	-7%	-1%	-3%	-0.4	-0.6	12.3	26%	23%	11.5	20%	12%
Euro Stoxx 50 Index	SX5E INDEX	0.40%	4%	5%	13%	1%	-0.3	-0.3	10.5	-6%	8%	10.9	-3%	4%
I-Shares China Large-Cap ETF	FXI US EQUITY	-5.35%	-12%	-12%	-8%	-23%	-0.4	-0.8	23.6	-6%	54%	20.8	8%	29%
I-Shares MSCI Emerging Markets ETF	EEM US EQUITY	-7.65%	-15%	-15%	-4%	-11%	-0.8	-0.9	20.6	4%	53%	17.6	0%	28%
CURRENCIES														
PowerShares US Dollar Index ETF	UUP US EQUITY	4.00%	7%	7%	13%	11%	-0.4	-0.2	5.6	-13%	16%	6.1	-16%	7%
Currency Shares Japanese Yen ETF	FXJ US EQUITY	-0.25%	9%	9%	10%	11%	-0.1	0.0	5.7	-3%	8%	6.2	-6%	3%
Currency Shares Euro Trust ETF	FXE US EQUITY	-2.66%	-2%	-2%	-14%	-7%	0.0	-0.3	6.9	-11%	21%	6.8	-7%	12%
Currency Shares British Pound ETF	FXB US EQUITY	-3.29%	5%	5%	10%	4%	-0.1	0.0	9.2	21%	62%	9.7	22%	61%
COMMODITIES														
United States Oil Fund ETF	USO US EQUITY	24.56%	16%	16%	11%	0%	0.9	0.6	21.6	-4%	25%	25.2	12%	27%
United States Natural Gas Fund ETF	UNG US EQUITY	5.45%	17%	17%	20%	41%	0.1	0.3	22.4	48%	6%	26.1	22%	6%
SPDR Gold Shares ETF	GLD US EQUITY	-8.22%	-18%	-18%	-15%	-11%	-1.6	-1.6	11.5	0%	25%	9.4	-9%	2%
PowerShares DB Agriculture Fund ETF	DBA US EQUITY	-8.96%	30%	30%	12%	17%	0.1	0.0	12.3	5%	47%	16.0	16%	64%
PowerShares DB Base Metals Fund ETF	DBB US EQUITY	-14.73%	-2%	-2%	3%	-4%	-0.5	-0.4	22.3	5%	65%	21.9	8%	46%
FIXED INCOME														
I-Shares IBOXX HY Corporate Bond ETF	HYG US EQUITY	2.26%	19%	19%	23%	64%	0.1	0.1	2.7	34%	3%	3.3	-3%	2%
I-Shares 7-10 Year Treasury Bond ETF	IEF US EQUITY	-2.92%	51%	51%	29%	15%	1.6	1.9	3.2	-8%	0%	4.9	20%	12%
I-Shares IBOXX IG Corporate Bond ETF	LQD US EQUITY	-3.40%	15%	15%	21%	6%	0.0	-0.1	3.7	0%	7%	4.3	8%	5%
I-Shares J.P. Morgan USD EM Bond ETF	EMB US EQUITY	-4.88%	-19%	-19%	-2%	1%	-1.9	-1.7	6.5	0%	61%	5.3	-20%	12%
I-Shares 20+ Year Treasury Bond ETF	TLT US EQUITY	-6.06%	19%	19%	13%	-10%	1.5	1.2	7.5	-15%	0%	8.9	12%	3%

Data Source: CBOE, CME, Bloomberg

# CHEAPEST GLOBAL MACRO HEDGING COSTS IN RATE-SENSITIVITIES

THE MODEL BELOW SCREENS A DIVERSE UNIVERSE ACROSS GLOBAL EQUITIES AND FICC TO FIND THE MOST DIVERGENT HEDGING COSTS (NORMALIZED WITH A HISTORICAL PERCENTILE READING) 3 & 6-MONTHS FORWARD. A DIVERSE SET OF RATE SENSITIVITIES IS WHERE YOU FIND THE CHEAPEST HEDGING COSTS.

## Global Macro Divergences: 3Mth Implied Volatility Percentile Reading

"3Mth" represents 3Mth Expiry Implied Volatility Historical Percentile Readings (13yr Lookback or Max Lookback)

### HIGH VOLATILITY DIVERGENCES (HIGHEST PERCENTILE READINGS)

SECURITY	TICKER	3Mth Expiry IVOL Percentile Reading
I-Shares MSCI Turkey ETF	<a href="#">TUR US Equity</a>	96%
I-Path Bloomberg Sugar Subindex Total	<a href="#">SGGFF US Equity</a>	90%
I-Shares MSCI Brazil Capped ETF	<a href="#">EWZ US Equity</a>	89%
I-Shares MSCI South Africa ETF	<a href="#">EZA US Equity</a>	63%
Currency Shares British Pound Sterling T	<a href="#">FXB US Equity</a>	63%
Google	<a href="#">GOOG US Equity</a>	62%
I-Path Bloomberg Cocoa Total Return ET	<a href="#">NIB US Equity</a>	55%
Hong Kong Hang Seng Index	<a href="#">HSI Index</a>	46%
Nasdaq 100 Index	<a href="#">NDX Index</a>	44%
PowerShares DB Agriculture Fund ETF	<a href="#">DBA US Equity</a>	43%

### LOW VOLATILITY DIVERGENCES (LOWEST PERCENTILE READINGS)

SECURITY	TICKER	3Mth IVOL Percentile Reading
I-Shares National Muni Bond ETF	<a href="#">MUB US Equity</a>	1%
SPDR Gold Shares ETF	<a href="#">GLD US Equity</a>	1%
PowerShares DB Precious Metals Fund	<a href="#">DBP US Equity</a>	1%
Russell 2000 Index	<a href="#">RTY Index</a>	1%
I-Shares Transportation Average ETF	<a href="#">IYT US Equity</a>	1%
I-Shares Russell 2000 ETF	<a href="#">IWM US Equity</a>	0%
I-Shares IBOXX USD High Yield Corpora	<a href="#">HYG US Equity</a>	0%
I-Shares Russell 2000 Value ETF	<a href="#">IWN US Equity</a>	0%
I-Shares MSCI Europe Financials ETF	<a href="#">EUFN US Equity</a>	0%
I-Shares Pharmaceuticals ETF	<a href="#">IHE US Equity</a>	0%

Data Source: Bloomberg

## Global Macro Divergences: 6Mth Implied Volatility Percentile Reading

"6Mth" represents 6Mth Expiry Implied Volatility Historical Percentile Readings (13yr Lookback or Max Lookback)

### HIGH VOLATILITY DIVERGENCES (HIGHEST PERCENTILE READINGS)

SECURITY	TICKER	6Mth Expiry IVOL Percentile Reading
I-Shares MSCI Turkey ETF	<a href="#">TUR US Equity</a>	96%
I-Path Bloomberg Sugar Subindex Total	<a href="#">SGGFF US Equity</a>	91%
I-Shares MSCI Brazil Capped ETF	<a href="#">EWZ US Equity</a>	75%
I-Shares MSCI South Africa ETF	<a href="#">EZA US Equity</a>	63%
Google	<a href="#">GOOG US Equity</a>	61%
Currency Shares British Pound Sterling T	<a href="#">FXB US Equity</a>	57%
I-Path Bloomberg Cocoa Total Return ET	<a href="#">NIB US Equity</a>	54%
PowerShares DB Agriculture Fund ETF	<a href="#">DBA US Equity</a>	46%
Hong Kong Hang Seng Index	<a href="#">HSI Index</a>	43%
PowerShares DB Base Metals Fund ETF	<a href="#">DBB US Equity</a>	42%

### LOW VOLATILITY DIVERGENCES (LOWEST PERCENTILE READINGS)

SECURITY	TICKER	6Mth IVOL Percentile Reading
Russell 2000 Index	<a href="#">RTY Index</a>	1%
I-Shares Russell 1000 ETF	<a href="#">IWB US Equity</a>	1%
I-Shares National Muni Bond ETF	<a href="#">MUB US Equity</a>	1%
I-Shares Pharmaceuticals ETF	<a href="#">IHE US Equity</a>	1%
I-Shares Russell 2000 ETF	<a href="#">IWM US Equity</a>	1%
SPDR Gold Shares ETF	<a href="#">GLD US Equity</a>	1%
I-Shares IBOXX USD High Yield Corpora	<a href="#">HYG US Equity</a>	1%
I-Shares Russell 1000 Value ETF	<a href="#">IWD US Equity</a>	1%
I-Shares Russell 2000 Value ETF	<a href="#">IWN US Equity</a>	0%
SPDR Bloomberg Barclays High Yield Bc	<a href="#">JNK US Equity</a>	0%

Data Source: Bloomberg

# SHORT-TREASURIES: A CONSENSUS POSITION YOU DO NOT WANT TO CHASE WITH QUAD 4 IN Q4

**Takeaway:** We're more than happy to be on the other side of a growing consensus macro position with our call that the peak for inflation and long-term interest rates is in.

[#Quad 4 in Q4](#) would likely be a low-volatility, painful bleed for those long of rates-rising and inflation breaking out.

CFTC NET NON-COMMERCIAL FUTURES & OPTIONS POSITIONING							
EQUITIES	Current Contract Length	WW Chg.	M/M Chg.	3M Chg.	6M Chg.	TTM Z-Score	3Yr Z-Score
S&P 500 (Index + E-Mini)	134,743	18,260	18,596	(58,262)	47,695	-0.3	0.4
Dow Jones (Mini)	40,545	2,629	12,995	27,706	13,142	0.0	-0.5
Nasdaq 100 (Mini)	29,413	(5,070)	(1,940)	6,457	17,162	0.7	-0.5
Russell 2000 (Mini + E-Mini)	3,282	(264)	(1,482)	(67,981)	(20,324)	-0.3	-0.1
Nikkei Index	(8,936)	(5,070)	(3,620)	(3,318)	(18,909)	-1.8	-2.6
CBOE Volatility Index (VIX)	(119,774)	658	(17,949)	(62,224)	(191,850)	-0.8	-0.6
INTEREST RATES	Current Contract Length	W/W Chg.	M/M Chg.	3M Chg.	6M Chg.	TTM Z-Score	3Yr Z-Score
30D Fed Funds	(75,403)	(14,223)	(96,689)	(287,307)	(180,035)	-0.9	-0.2
2Yr Note	(246,492)	(33,316)	(135,859)	(260,861)	(66,389)	-1.1	-1.5
5Yr Note	(809,808)	38,775	(51,662)	(305,849)	(374,194)	-1.8	-2.2
10Yr Note*	(689,162)	(32,489)	(108,162)	(501,740)	(422,926)	-1.9	-2.1
30Yr Bond*	(81,607)	(32,041)	(61,603)	(109,911)	(214,716)	-2.0	-2.8
CURRENCIES	Current Contract Length	W/W Chg.	M/M Chg.	3M Chg.	6M Chg.	TTM Z-Score	3Yr Z-Score
USD	37,486	2,951	3,271	19,313	37,522	2.3	0.8
JPY	(68,068)	(11,147)	(16,009)	(29,736)	(46,342)	0.0	-0.2
EUR	5,595	(8,501)	11,423	(22,188)	(120,434)	-1.6	-0.4
GBP	(75,150)	(17,892)	(4,958)	(53,038)	(99,536)	-2.2	-1.0
AUD	(68,669)	(2,107)	(18,251)	(25,305)	(88,067)	-1.8	-2.4
CAD	(29,344)	(1,890)	(1,644)	(15,057)	(57,637)	-0.9	-0.6
MXN	40,537	25,944	14,700	52,017	(26,217)	-0.4	0.2
NZD	(31,989)	(9,342)	(6,846)	(16,049)	(51,615)	-1.7	-1.9
CHF	(18,101)	16,862	29,115	14,383	(9,855)	0.5	0.0
RUB	(3,830)	(6,724)	(8,809)	(13,679)	(22,397)	-2.6	-1.9
ZAR	(2,393)	(3,597)	(3,744)	(8,674)	(10,437)	-2.8	-1.4
BRL	(26,000)	560	(7,516)	2,024	(13,505)	-1.0	-1.7
COMMODITIES	Current Contract Length	W/W Chg.	M/M Chg.	3M Chg.	6M Chg.	TTM Z-Score	3Yr Z-Score
Crude Oil	565,335	(19,010)	(9,152)	(62,509)	(175,333)	-1.1	0.1
Gold	(28,919)	(402)	(4,955)	(112,669)	(182,235)	-1.9	-2.4
Copper	(892)	8,072	1,021	(55,832)	(32,895)	-1.8	-1.6
Natural Gas	(83,329)	(11,447)	(20,027)	(33,130)	17,919	0.3	-0.5
RBOB Gasoline	105,330	6,927	3,042	6,697	25,504	1.4	1.6
ULSD Heating Oil	43,565	2,547	8,446	(6,575)	30,025	0.1	0.5
Silver	(26,749)	1,574	(19,269)	(65,919)	(12,728)	-1.6	-2.0
Platinum	(1,500)	5,661	9,086	3,316	(30,009)	-1.0	-1.5
Aluminum	163,475	(2,043)	(1,765)	6,145	(3,122)	0.4	0.7
Nickel	42,230	(365)	(1,818)	(1,834)	65	1.4	0.2
Corn	(86,219)	(92,460)	(145,326)	(206,499)	(410,442)	-0.8	-0.9
Soybeans	(82,487)	(4,633)	(49,426)	(80,601)	(278,574)	-1.3	-1.5
Wheat	3,468	(14,959)	(53,139)	4,725	27,833	0.6	1.0
Live Cattle	92,324	18,567	10,785	62,595	4,538	0.1	-0.2
Lean Hogs	21,117	1,316	20,035	22,306	8,924	-0.2	-0.6
Sugar	(49,167)	57,334	67,900	(61,832)	63,744	0.1	-0.6
Cotton	73,930	(8,733)	(14,266)	(33,220)	(23,485)	-1.1	-0.8
Coffee	(106,651)	(7,358)	(7,443)	(51,752)	(59,343)	-2.4	-2.1
Cocoa	2,376	(4,187)	2,727	(37,888)	(41,130)	-0.8	0.0
Orange Juice	(308)	(1,005)	(2,228)	(4,687)	2,281	-0.4	-0.5
Data Source: CFTC, LME, CME, Bloomberg		*Combines Legacy & Ultra Contracts					

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