



THE
MACRO
SHOW

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TOP 3 THINGS

Top 3 Things

1

FX

2

#QUAD4

3

VIX





1

FX

The best thing to do during a #QuadShift is stay with the Asset Allocations that work in both Quads! We're staying with the Core Short US Dollar position into the Fed meeting. What the ECB did was significant - they didn't pander to calls for cowbell and, like Hedgeye, have INFLATION going back UP in Q4 and into next year. We're long Euros (FXE) and Pounds (FXB) expecting NO CUT from the BOE later this week. On a relative basis, this makes the US look panicked as #Quad4 (slowing) Data hits...

2 #Quad4

Our Fed Front-Runner (UST 2yr Yield SIGNAL) is diving into the depths of the SEP MONTHLY #Quad4, making lower-Cycle-lows at 3.55% this morning. This keeps getting us paid in Steepener (IVOL) and Gold terms obviously with Gold (AAAU + GLD) ramping to all-time highs. If it was a full-send #QuadShift into #Quad3, Copper wouldn't be down -0.4% in kind this morning and Oil wouldn't be failing @Hedgeye TRADE and TREND Signal Levels of resistance

The background features a dark blue color scheme with faint, semi-transparent financial charts. On the left, there's a candlestick chart with a price of 3.59.38. On the right, there's a line chart with a price of 11.0.77. In the center, there are some circular patterns and a price of 8.80. The overall aesthetic is technical and data-driven.

3

VIX

Very complacent (Bulls) and capitulatory (Bears covering Friday) setup into both the Fed Meeting and Quarterly OPEX (Friday) with super-short-dated Calendar Vol back down at 13 this morning and only hooking back up towards 17 for FOMC day. Usually renewed short-term put buying gets that back into the 20s (day before event), so we'll see how the next 2 days go but front-month VIX did close above TREND support on Friday, despite 1mth SPX realized Vol trading below 3mth

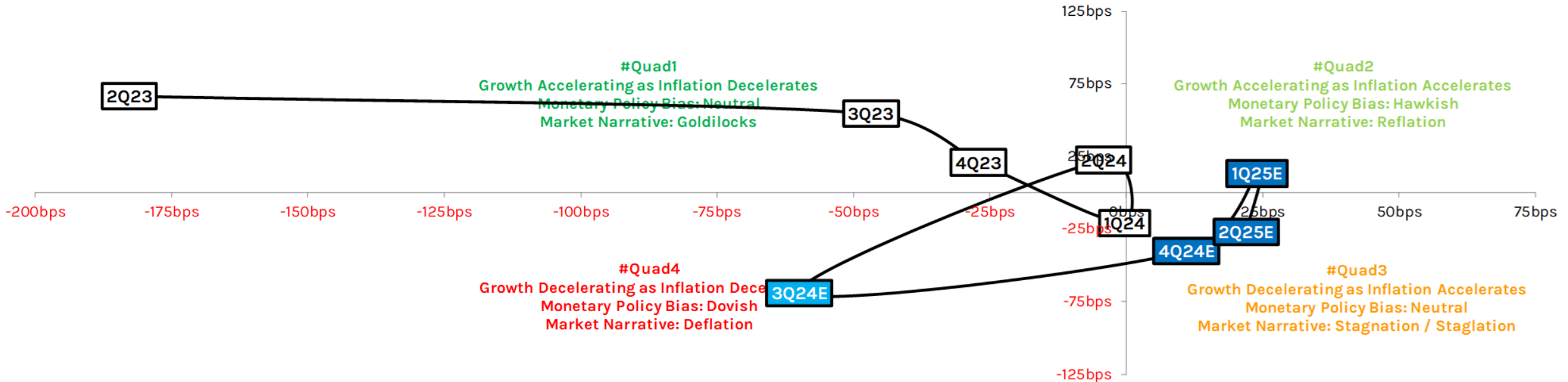
OUR PROCESS

What Are The Quads?

Our GIP Model is a quantitatively oriented, regime-based framework that helps investors proactively prepare for volatility phase transitions within and across asset classes by triangulating the three factors that matter most to Macro Risk Management – i.e. GROWTH, INFLATION, and POLICY.

United States	3Q21	4Q21	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23	4Q23	1Q24	2Q24	← Actuals Estimates →	3Q24E	4Q24E	1Q25E	2Q25E
Real GDP QoQ SAAR	3.30%	7.00%	-2.00%	-0.60%	2.70%	2.60%	2.20%	2.10%	4.90%	3.40%	1.40%	3.00%	Real GDP QoQ SAAR	2.09%	1.78%	1.94%	1.87%
Real GDP YoY	4.74%	5.42%	3.57%	1.87%	1.71%	0.65%	1.72%	2.38%	2.93%	3.13%	2.92%	3.15%	Real GDP YoY	2.46%	2.05%	2.19%	1.92%
2yr Comparative Base Effects	0.60%	1.05%	1.40%	2.21%	1.63%	2.17%	2.57%	6.91%	3.22%	3.04%	2.64%	2.13%	2yr Comparative Base Effects	2.32%	1.89%	2.32%	2.76%
Headline CPI YoY	5.34%	6.69%	7.96%	8.63%	8.33%	7.10%	5.81%	3.98%	3.51%	3.24%	3.24%	3.20%	Headline CPI YoY	2.60%	2.71%	2.95%	3.17%
2yr Comparative Base Effects	1.49%	1.64%	2.01%	2.61%	3.28%	3.96%	4.93%	6.74%	6.83%	6.90%	6.89%	6.31%	2yr Comparative Base Effects	5.92%	5.17%	4.53%	3.59%

United States



◆ x-axis: First Difference of YoY Headline CPI;
 y-axis: First Difference of YoY Real GDP

Data Source: BEA, BLS Light Blue box = Hedgeye Nowcast Model estimate. Dark Blue boxes = Hedgeye Comparative Base Effects Model estimates.

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Updated: 9/13/2024

Highest/Lowest Expected Values By Quad Regime

Quad 1: Goldilocks

Best Asset Classes:

Equities, Credit, Commodities, FX

Worst Asset Classes:

Fixed Income, USD

Best Equity Sectors:

Tech, Consumer Discretionary, Communication Services, Industrials, Materials, REITS

Worst Equity Sectors:

Utilities, Consumer Staples, Health Care

Best Equity Style Factors:

High Beta, Momentum, Leverage, Secular Growth, Mid Caps

Worst Equity Style Factors:

Low Beta, Defensives, Value, Dividend Yield, Small Caps

Best Fixed Income Sectors:

BDCs, Convertibles, HY Credit, EM \$ Debt, Leveraged Loans

Worst Fixed Income Sectors:

TIPS, Short Duration Treasuries, MBS, Treasury Belly, Long Bond

Quad 2: Reflation

Best Asset Classes:

Commodities, Equities, Credit, FX

Worst Asset Classes:

Fixed Income, USD

Best Equity Sectors:

Tech, Industrials, Financials, Energy

Worst Equity Sectors:

Utilities, Communication Services, Consumer Staples, REITs, Health Care

Best Equity Style Factors:

Secular Growth, High Beta, Small Caps, Cyclical Growth, Momentum

Worst Equity Style Factors:

Low Beta, Dividend Yield, Value, Defensives, Size

Best Fixed Income Sectors:

Convertibles, BDCs, Preferreds, Leveraged Loans, HY Credit

Worst Fixed Income Sectors:

Long Bond, Treasury Belly, Munis, MBS, IG Credit

Quad 3: Stagflation

Best Asset Classes:

Gold, Commodities, Fixed Income

Worst Asset Classes:

Credit

Best Equity Sectors:

Utilities, Energy, REITs, Tech, Consumer Staples, Health Care

Worst Equity Sectors:

Communication Services, Financials, Consumer Discretionary, Industrials, Materials

Best Equity Style Factors:

Secular Growth, Momentum, Mid Caps, Low Beta, Quality

Worst Equity Style Factors:

Small Caps, Dividend Yield, Value, Defensives, Size

Best Fixed Income Sectors:

Munis, EM \$ Debt, Long Bond, TIPS, Treasury Belly

Worst Fixed Income Sectors:

BDCs, Preferreds, Convertibles, Leveraged Loans, HY Credit

Quad 4: Deflation

Best Asset Classes:

Fixed Income, Gold, USD

Worst Asset Classes:

Commodities, Equities, Credit, FX

Best Equity Sectors:

Consumer Staples, Health Care, Utilities

Worst Equity Sectors:

Energy, Tech, Financials, Industrials, Consumer Discretionary

Best Equity Style Factors:

Low Beta, Dividend Yield, Quality, Defensives, Value

Worst Equity Style Factors:

High Beta, Momentum, Leverage, Secular Growth, Cyclical Growth

Best Fixed Income Sectors:

Long Bond, Treasury Belly, IG Credit, Munis, MBS

Worst Fixed Income Sectors:

Preferreds, EM Local Currency, BDCs, Leveraged Loans, TIPS

Position Sizing

Dynamic Asset Allocation	Max Per Position Size
Foreign Currency	12%
Fixed Income	10%
Equities	6%
Commodities	4%
Options	1-2%

Long-Short Equity Allocation	Long	Short
Maximum	6%	3%
	4%	2%
Minimum	2%	1%

- Build incrementally to max position (max/min based on volatility)
- Establish minimum position size for each asset class
- **Multiple positions within an asset class (ex. Bullish on four different Fixed Income assets, meaning at max could be 40% of capital)**

- Same basic principles as “Dynamic Asset Allocation” with...
- Long positions should always be larger than shorts
- Dynamics of Macro vs. Earnings Season (outside of Earnings season the sector & factor exposures determined by the Macro environment matter more than your long-term fundamental call on a company)

CHART CALLOUTS

Global Infrastructure ETF



Subscribe to Investing Ideas (Listed by Time Held)

LONGS									
Ticker	Date Added	Price Added*	Last Price	Absolute Performance	S&P 500	Relative Performance**	Days Active		
XYL	1/16/2024	\$ 110.96	\$ 130.83	17.9%	18.34%	-0.4%	174		
NEM	5/23/2024	\$ 41.23	\$ 53.71	30.3%	6.9%	23.4%	82		
DGX	5/28/2024	\$ 138.91	\$ 154.38	11.1%	6.1%	5.1%	79		
PM	6/14/2024	\$ 102.20	\$ 125.62	22.9%	3.5%	19.4%	66		
ULS	6/27/2024	\$ 41.04	\$ 48.84	19.0%	2.9%	16.1%	57		

SHORTS									
Ticker	Date Added	Price Added*	Last Price	Absolute Performance	S&P 500	Relative Performance**	Days Active		
MPW	5/16/2022	\$ 18.28	\$ 6.37	65.2%	-40.4%	105.5%	610		
EWCZ	1/9/2024	\$ 15.34	\$ 7.07	53.9%	-18.6%	72.5%	179		
ULTA	6/14/2024	\$ 390.82	\$ 378.34	3.2%	-3.5%	6.7%	66		

India



Gold



2-Year U.S Treasury Yield



MACRO GRIND

Sector Performance

<u>SECTOR</u>	<u>Ticker</u>	<u>Price</u>	<u>1-Day %</u> <u>Chg</u>	<u>MTD %</u> <u>Chg</u>	<u>QTD %</u> <u>Chg</u>	<u>YTD %</u> <u>Chg</u>
Consumer Discretionary	XLY	\$192.48	0.68%	2.86%	5.53%	7.64%
Financial Select Sector	XLF	\$44.51	0.29%	-2.69%	8.27%	18.38%
Health Care Select Sector	XLV	\$156.16	0.21%	-0.66%	7.14%	14.50%
Technology Select Sector	XLK	\$220.44	0.50%	0.05%	-2.56%	14.53%
Consumer Staples Select Sector	XLP	\$83.93	0.71%	1.72%	9.60%	16.52%
Industrial Select Sector	XLI	\$130.57	1.01%	-0.68%	7.14%	14.55%
Materials Select Sector	XLB	\$92.69	0.90%	-1.69%	4.96%	8.36%
The Energy Select Sector	XLE	\$85.59	0.56%	-6.23%	-6.10%	2.09%
Utilities Select Sector	XLU	\$78.54	1.41%	2.95%	15.26%	24.02%
Real Estate Select Sector	XLRE	\$45.21	0.71%	3.81%	17.70%	12.86%
Communications Services Sector	XLC	\$86.87	0.96%	-0.52%	1.41%	19.56%
S&P 500	SPX	5,626.02	0.54%	-0.40%	3.03%	17.95%

Sector Relative Performance

	<u>Ticker</u>	<u>Price</u>	<u>1-Day %</u> <u>Chg</u>	<u>MTD %</u> <u>Chg</u>	<u>QTD %</u> <u>Chg</u>	<u>YTD %</u> <u>Chg</u>
Consumer Discretionary	XLY	\$192.48	0.14%	3.26%	2.49%	-10.31%
Financial Select Sector	XLF	\$44.51	-0.25%	-2.29%	5.24%	0.43%
Health Care Select Sector	XLV	\$156.16	-0.34%	-0.27%	4.11%	-3.45%
Technology Select Sector	XLK	\$220.44	-0.04%	0.45%	-5.59%	-3.42%
Consumer Staples Select Sector	XLP	\$83.93	0.17%	2.12%	6.57%	-1.43%
Industrial Select Sector	XLI	\$130.57	0.47%	-0.28%	4.11%	-3.40%
Materials Select Sector	XLB	\$92.69	0.36%	-1.29%	1.93%	-9.59%
The Energy Select Sector	XLE	\$85.59	0.02%	-5.84%	-9.13%	-15.86%
Utilities Select Sector	XLU	\$78.54	0.87%	3.35%	12.23%	6.07%
Real Estate Select Sector	XLRE	\$45.21	0.17%	4.21%	14.67%	-5.09%
Communications Services Sector	XLC	\$86.87	0.42%	-0.12%	-1.62%	1.61%

Market Share Volume & Total Value Traded

<u>INDEX/SECURITY</u>	VOLUME: 9/13 vs.			
	<u>Prior Day</u>	<u>1M Ave</u>	<u>3M ave</u>	<u>1Y Ave</u>
Total Market Volume*	-4%	-1%	-6%	-13%
Total Exchange Volume**	-5%	-5%	-11%	-11%

*Total Market Volume = Total US exchange volume plus OTC and OTCBB trading volume for all security types. Calculated by Bloomberg.

**Tape A+B+C volume = total US exchange volume

*** Total Traded Value for Russell 3000 (total mkt proxy)

Style Factor Performance

FACTOR		1D	1W	1M	3M	6M	YTD
		% Chg	% Chg	% Chg	% Chg	% Chg	% Chg
Debt	High Debt/EV	1.3%	2.4%	2.3%	7.2%	14.2%	14.6%
	Low Debt/EV	0.7%	3.7%	1.5%	4.9%	4.0%	11.6%
SI	High Short Interest	1.6%	3.7%	-0.7%	0.3%	1.4%	4.6%
	Low Short Interest	0.5%	2.4%	2.9%	8.5%	10.5%	17.7%
BETA	High Beta	1.0%	5.1%	-1.5%	3.2%	3.0%	9.2%
	Low Beta	0.8%	1.2%	5.4%	9.1%	11.6%	14.7%
YIELD	High Yield	1.0%	1.6%	2.3%	6.4%	10.0%	7.8%
	Low Yield	1.1%	4.0%	0.1%	4.3%	2.6%	9.8%
MKT CAP	MCAP Bottom 25%	1.5%	2.5%	-0.7%	3.0%	1.6%	1.4%
	MCAP Top 25%	0.7%	3.3%	3.2%	8.3%	10.8%	18.3%
Sales	Top 25% Sales Growth	0.8%	4.3%	1.3%	5.2%	8.7%	17.5%
	Bottom 25% Sales Growth	1.2%	1.9%	1.0%	4.2%	7.2%	7.5%
EPS	Top 25% EPS Growth	1.2%	3.9%	-0.2%	2.8%	6.3%	12.1%
	Bottom 25% EPS Growth	1.1%	1.9%	3.0%	6.8%	9.3%	9.7%

**Mean Performance of Top Quartile vs. Bottom Quartile, S&P500 Companies*

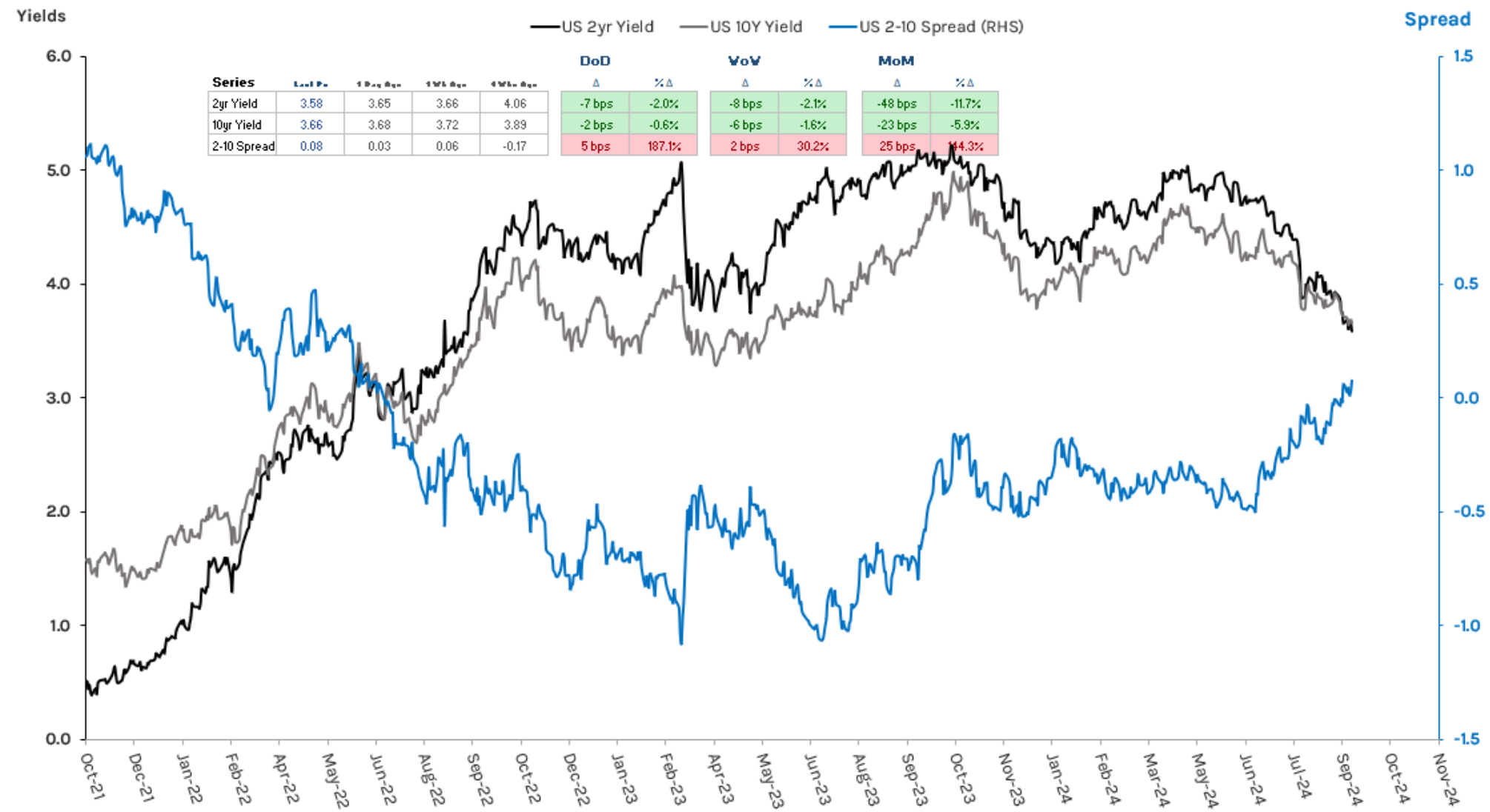
Key \$USD Correlations

Key SUSD Correlations*

*Days = Trading Days

METRIC	Key SUSD Correlations*					52-Wk Rolling 30D Correlation			
	15D	30D	90D	120D	180D	High	Low	% Time Pos	% Time Neg
SPX	-0.36	-0.77	-0.41	-0.57	-0.03	0.83	-0.93	33%	67%
BRENT Oil	-0.56	0.43	0.80	0.77	0.74	0.80	-0.55	78%	22%
CRB Index	-0.58	-0.14	0.78	0.77	0.71	0.82	-0.70	74%	26%
GOLD	-0.25	-0.82	-0.91	-0.78	-0.03	0.81	-0.91	14%	86%
Bitcoin	-0.51	-0.17	0.48	0.42	0.36	0.68	-0.88	22%	78%

U.S. Treasury Yield Curve



CFTC Non-Commercial Net Long Positioning (Updated weekly)

	METRIC	Latest	W/W Chg	3M Ave	6M Ave	1Y Ave	3Y		Z-Score	
							Max	Min	1Y	3Y
EQUITIES	SPX (Index + E-mini)	(61,408)	2,768	(55,090)	(58,335)	(97,305)	248,601	(447,046)	0.48X	0.22X
	VIX	(15,111)	10,778	(42,710)	(40,741)	(40,772)	(13,979)	(106,345)	1.93X	2.05X
	Russell 2000 (mini)	5,425	6,838	(34,677)	(33,119)	(33,715)	21,422	(120,386)	1.69X	2.01X
	Dow Jones (mini)	8,180	1,039	7,295	10,257	2,936	24,410	(37,076)	0.27X	1.06X
	Nasdaq (mini)	31,323	1,654	12,593	8,208	13,222	41,791	(24,622)	1.40X	1.48X
	Nikkei Index	(1,966)	473	(3,429)	(2,643)	(2,641)	2,324	(9,401)	0.48X	0.30X
RATES	10Y UST	(948,794)	31,296	(658,275)	(567,184)	(625,610)	203,590	(980,090)	-2.12X	-2.96X
	2Y UST	(1,011,718)	(26,459)	(1,142,811)	(1,064,946)	(1,167,504)	86,786	(1,476,201)	0.95X	-0.73X
	5Y UST	(1,693,749)	19,929	(1,618,800)	(1,457,394)	(1,371,561)	(82,363)	(1,740,785)	-1.76X	-1.80X
	UST Bonds	(56,599)	(25,884)	(34,477)	(24,646)	(76,028)	49,853	(229,064)	0.30X	0.37X
	30D Fed Funds	(56,421)	34,313	(127,724)	(67,366)	(114,686)	147,168	(295,670)	0.62X	0.16X
CURRENCIES	SUSD	20,206	763	17,869	9,605	10,121	44,971	(1,915)	1.19X	-0.02X
	JPY	55,375	16,609	(68,791)	(107,693)	(102,991)	55,375	(189,560)	2.75X	-2.07X
	EUR	93,465	(23,197)	47,022	36,333	67,030	198,934	(47,358)	0.59X	0.29X
	GBP	95,283	(21,069)	89,286	51,650	32,366	147,196	(79,646)	1.41X	2.11X
	AUD	(14,020)	(7,351)	(21,034)	(51,103)	(60,175)	10,369	(107,625)	1.57X	1.76X
	CAD	(70,937)	(1,656)	(136,948)	(106,762)	(71,297)	24,340	(197,113)	0.01X	-0.88X
	MXN	27,064	(5,472)	51,592	87,706	80,147	139,721	(64,080)	-1.66X	-0.13X
	NZD	(3,315)	(3,077)	3,945	(456)	(3,354)	30,743	(21,272)	0.00X	-0.04X
CHF	(22,235)	740	(34,019)	(35,775)	(24,098)	1,383	(50,931)	0.13X	-0.70X	
COMMODITIES	CRUDE OIL	174,881	(29,903)	256,068	260,505	257,398	506,352	170,119	-1.55X	-1.55X
	GOLD	226,709	119	206,470	190,015	139,945	236,818	(41,300)	1.41X	2.09X
	COPPER	14,095	(172)	30,381	40,246	14,072	68,048	(35,712)	0.00X	0.42X
	Natural Gas	(87,925)	12,798	(90,962)	(104,011)	(100,914)	(49,985)	(182,100)	0.51X	1.29X
	RBOB Gasoline	15,551	(4,227)	27,513	45,072	51,718	83,766	11,588	-1.84X	-2.54X
	ULSD Heating Oil	(7,047)	(16,474)	11,628	11,344	19,982	43,514	(14,002)	-2.42X	-1.95X
	Silver	40,105	(758)	46,189	49,011	35,105	56,260	(12,811)	0.32X	0.88X
	Platinum	8,927	9,506	14,672	16,266	12,479	31,152	(8,246)	-0.39X	-0.29X
	Corn	(45,411)	49,974	(186,659)	(164,756)	(168,218)	491,135	(277,559)	1.84X	-0.62X
	Soybeans	(132,244)	16,624	(159,446)	(134,581)	(85,614)	214,132	(194,765)	-0.53X	-1.56X
	Wheat	(20,040)	14,617	(43,981)	(41,831)	(50,719)	33,169	(107,489)	1.52X	0.35X
	Live Cattle	60,991	2,317	74,150	74,412	72,102	144,819	30,899	-0.50X	-0.76X
	Lean Hogs	43,324	(964)	17,503	46,534	35,134	110,102	(29,164)	0.24X	0.25X
	Sugar	46,483	(11,622)	29,878	28,855	76,216	259,115	(25,165)	-0.40X	-1.08X
	Cotton	(41,243)	(6,824)	(28,731)	3,272	22,757	127,919	(41,243)	-1.47X	-1.91X
	Coffee	62,495	(764)	65,297	65,259	48,460	76,932	(37,467)	0.56X	0.98X
	Cocoa	23,994	(438)	21,913	21,316	41,369	86,695	(32,129)	-0.77X	-0.14X
Orange Juice	4,141	354	3,490	3,200	2,720	6,673	(904)	1.20X	0.41X	

VOLATILITY

Implied & Realized Volatility

TIME WINDOW SETTING:		TOTAL RETURN PERFORMANCE	IVOL PREMIUM/DISCOUNT					REALIZED VOLATILITY TRENDS		IMPLIED VOLATILITY TRENDS		
VOLATILITY_30D		YTD %	IVOL PREM %	Yesterday	1W Ago	1M Ago	TTM Z-Score	3Yr Z-Score	MM %	PERCENTILE 10YR	MM %	PERCENTILE 10YR
PUT_IMP_VOL_30D	TICKER		IVOL / RVOL									
US EQUITIES												
CURRENT												
SPDR S&P 500 ETF Trust	SPY	18.24%	-5%	-3%	4%	-17%	-1.6	-1.1	-5%	75%	9%	51%
Power Shares QQQ Trust ETF	QQQ	16.07%	-13%	-12%	-4%	-27%	-1.6	-1.2	-9%	77%	8%	60%
I-Shares Russell 2000 ETF	IWM	8.03%	-8%	-11%	-3%	-28%	-0.8	-1.1	-11%	86%	15%	67%
Materials Sector SPDR ETF	XLB	8.36%	-10%	-19%	-1%	-21%	-1.0	-1.1	-8%	48%	6%	27%
Communication Services SPDR ETF	XLC	19.56%	-8%	-22%	33%	-12%	-0.7	-0.5	-8%	41%	-4%	20%
Energy Sector SPDR ETF	XLE	2.09%	8%	9%	0%	-5%	-0.8	-0.5	5%	41%	19%	38%
Financials Sector SPDR ETF	XLF	18.38%	11%	15%	23%	11%	-1.4	-0.8	-6%	55%	-6%	46%
Industrials Sector SPDR ETF	XLI	14.55%	-24%	1%	16%	-36%	-1.8	-1.7	-22%	54%	-7%	12%
Technology Sector SPDR ETF	XLK	14.53%	-26%	-26%	-20%	-36%	-1.5	-1.3	-14%	88%	-1%	70%
Consumer Staples Sector SPDR ETF	XLP	16.52%	-8%	14%	173%	97%	-0.9	-0.9	-7%	37%	-57%	10%
Real Estate Sector SPDR ETF	XLRE	12.86%	8%	11%	23%	-19%	0.3	0.2	-13%	45%	15%	45%
Utilities Sector SPDR ETF	XLU	24.02%	8%	15%	41%	-11%	-0.2	-0.3	-24%	19%	-8%	21%
Health Care Sector SPDR ETF	XLV	14.50%	-20%	-25%	10%	-19%	-1.5	-1.5	-15%	51%	-16%	10%
Consumer Discretionary Sector SPDR ETF	XLV	7.64%	-18%	-30%	-11%	-49%	-1.1	-1.1	-18%	77%	31%	62%
Retail SPDR ETF	XRT	4.42%	42%	52%	-9%	14%	0.3	0.5	-10%	73%	12%	83%
INTERNATIONAL EQUITIES												
I-Shares MSCI Emerging Markets ETF	EEM	6.52%	-29%	-26%	-9%	-36%	-1.3	-1.2	-7%	54%	3%	3%
Euro Stoxx 50 Index	SX5E Index	7.13%	3%	5%	3%	-33%	-0.4	-0.2	-30%	32%	8%	31%
I-Shares China Large-Cap ETF	FXI	7.62%	17%	16%	16%	6%	0.5	0.7	-8%	27%	2%	31%
I-Shares MSCI Japan ETF	EWJ	8.93%	-4%	-18%	-23%	-41%	-0.4	-0.5	-23%	88%	25%	90%
CURRENCIES												
PowerShares US Dollar Index ETF	UUP	4.02%	-32%	7%	5%	26%	-0.7	-1.0	16%	54%	-37%	1%
Currency Shares Euro Trust ETF	FXE	0.24%	-	15%	17%	78%	#VALUE!	#VALUE!	20%	36%	#VALUE!	#VALUE!
Currency Shares British Pound ETF	FXB	2.77%	-11%	-15%	-13%	31%	-0.5	-0.5	-4%	19%	-35%	3%
Currency Shares Japanese Yen ETF	FXJ	-0.32%	-12%	-19%	-17%	-30%	-0.6	-0.7	-18%	87%	4%	77%
COMMODITIES												
SPDR Gold Shares ETF	GLD	24.85%	13%	11%	9%	2%	0.5	0.1	-18%	59%	-9%	63%
United States Oil Fund ETF	USO	4.79%	1%	4%	4%	4%	-1.1	-0.8	24%	59%	19%	33%
United States Natural Gas Fund ETF	UNG	-28.55%	31%	14%	31%	26%	1.2	1.2	-1%	52%	3%	57%
Teucrium Corn ETF	CORN	-15.81%	5%	-8%	9%	2%	-1.1	-1.0	-12%	30%	-10%	9%
TEUCRIUM SOYBEAN FUND	SOYB	-18.11%	19%	-7%	21%	-10%	-0.3	-0.1	-9%	74%	20%	65%
VANECK STEEL ETF	SLX	-11.88%	49%	14%	46%	47%	-0.2	0.6	0%	32%	1%	63%
FIXED INCOME												
I-Shares 20+ Year Treasury Bond ETF	TLT	1.55%	-4%	-5%	1%	-12%	-0.3	-0.6	-3%	62%	5%	45%
I-Shares 7-10 Year Treasury Bond ETF	IEF	2.58%	12%	8%	8%	2%	0.3	0.3	-2%	70%	7%	60%
I-Shares IBOXX IG Corporate Bond ETF	LQD	2.30%	176%	75%	83%	102%	4.3	5.9	-11%	57%	21%	97%
I-Shares J.P. Morgan USD EM Bond ETF	EMB	4.48%	-	34%	70%	-	#VALUE!	#VALUE!	4%	58%	#VALUE!	#VALUE!
I-Shares IBOXX HY Corporate Bond ETF	HYG	2.89%	22%	34%	0%	-23%	0.2	0.4	-2%	35%	57%	38%
MEGA-CAP												
Apple	AAPL	15.57%	19%	18%	31%	-5%	0.1	0.1	-17%	38%	4%	41%
Amazon	AMZN	22.74%	-26%	-26%	-17%	-24%	-1.4	-1.2	8%	82%	5%	51%
Alphabet	GOOGL	12.72%	-1%	4%	14%	-8%	-0.3	-0.3	-1%	64%	7%	61%
Facebook	META	48.21%	21%	10%	14%	-27%	0.1	0.4	-35%	45%	7%	52%
Microsoft	MSFT	14.51%	18%	22%	38%	0%	-0.4	0.2	-10%	41%	6%	46%
Tesla	TSLA	-7.32%	-1%	-7%	-8%	-27%	0.0	-0.2	-19%	69%	11%	62%

Data Source: CBOE, CME

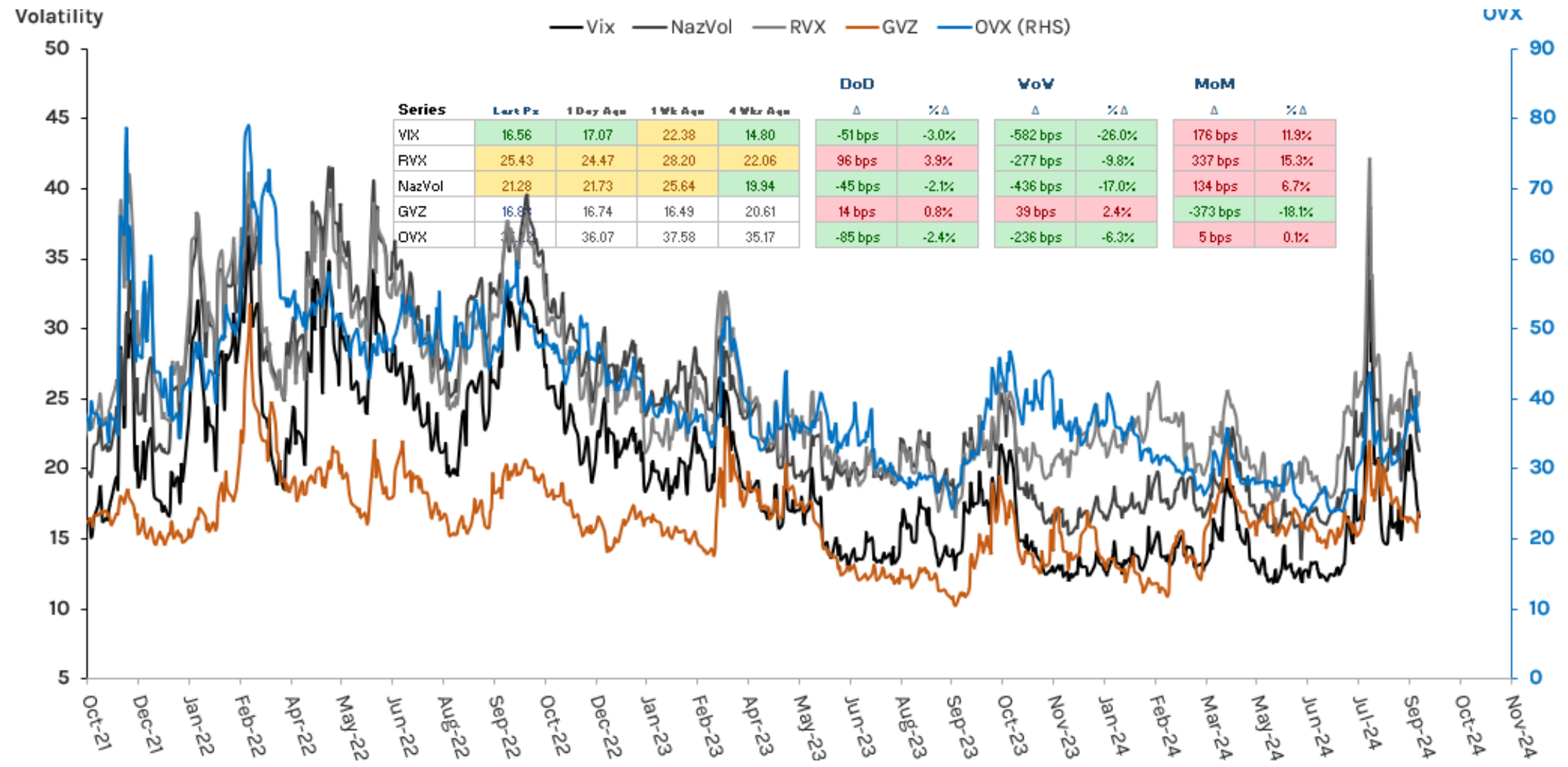
Bond Volatility (MOVE Index)



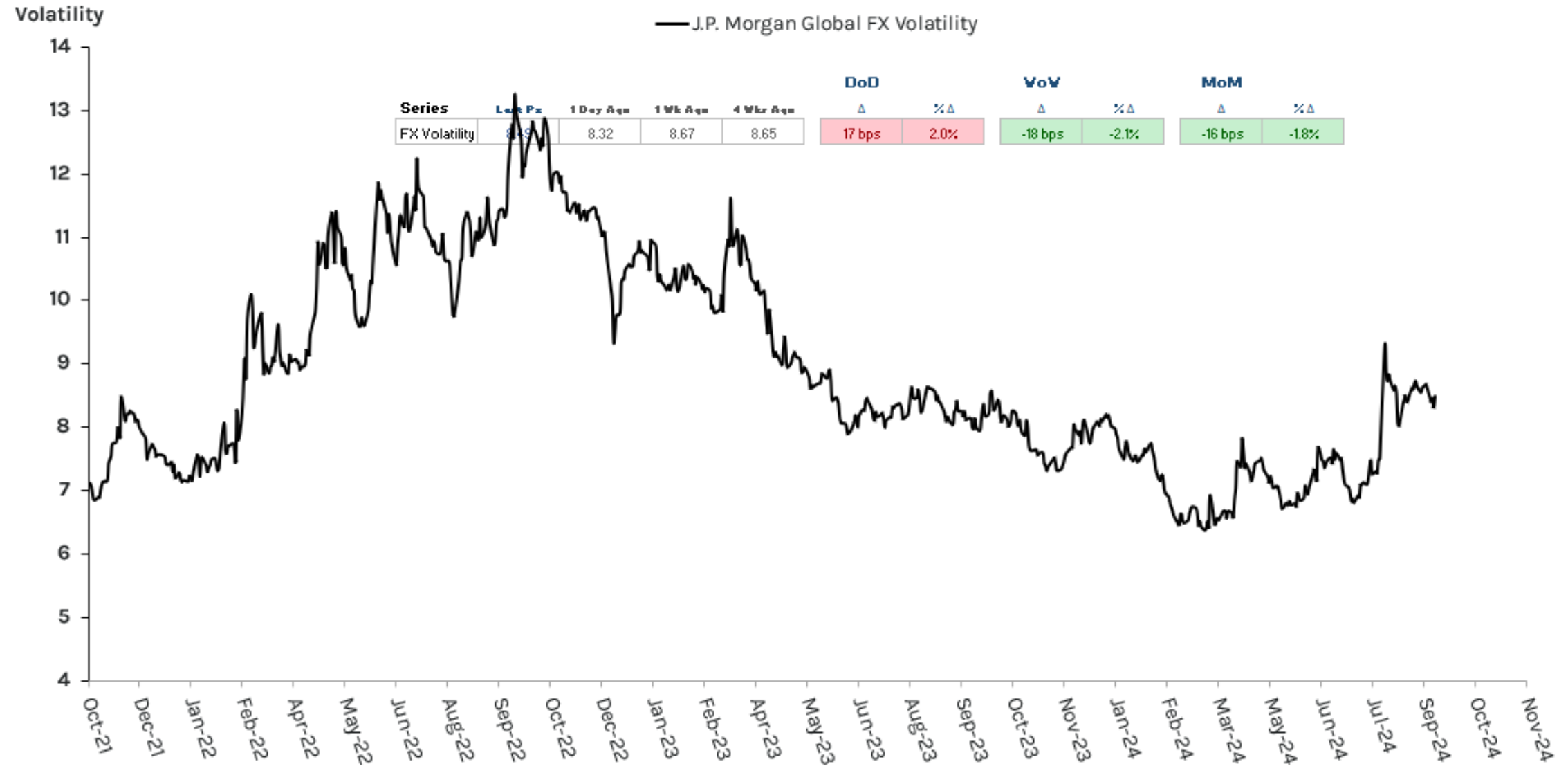
High Yield Market Volatility



Macro Volatility



Global Currency Volatility



10-Year BBB Corporate Spread

