



## **Time to Take a Breath**

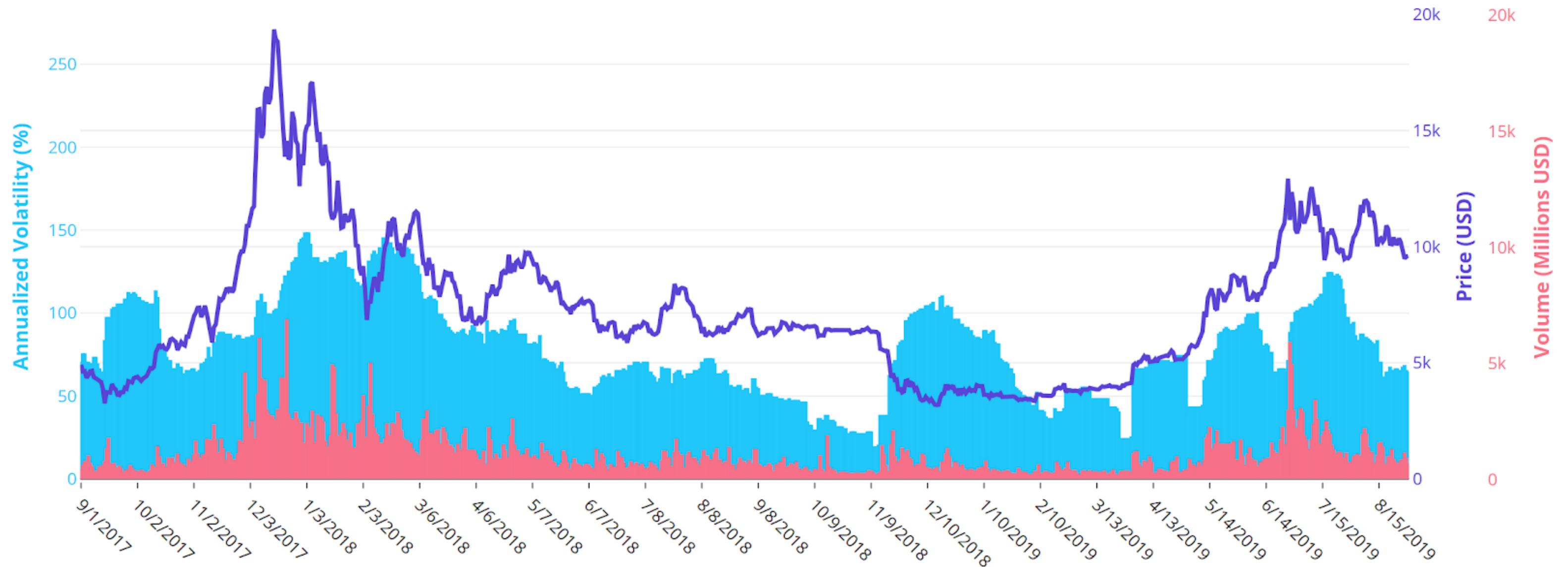
August 2019 Volatility Report

# August 2019 Takeaways

- After a bullish and active 2Q2019, bitcoin **volatility, trading volume, price, and velocity dampened in August** as the market reset and settled into a higher range.
- Bitcoin realized volatility retreated to its lowest level since 1Q2019, falling as much as 29 percentage points month-over-month to 64%; spot trading volume also weakened materially, plunging -38% month-over-month to \$31B, the **largest absolute decline in a year**.
- Excluding the S&P500, bitcoin became **more negatively correlated with traditional financial assets** in a **1-month window**; with the exception of crude oil and the S&P500, bitcoin grew slightly more positively correlated on a 1-year and 2-year basis.
- Bitcoin's **1-month correlation with the top 5 altcoins by market capitalization grew more positive**, amidst a broad decline in volatility.
- Global macroeconomic data signaled economic slowdown, driving recession fears higher and contributing to the **inversion of the U.S. yield curve**, the 10-year U.S. bond yield falling below the 2-year U.S. bond yield, for the first time since 2007.

# Volatility Trends

- For the first time since January, bitcoin's volatility, price, and velocity were all down month-over-month between July and August.
- Weakness across all metrics is likely explained by the market's **digestion of excessive volatility** between April and July, **summer seasonality**, and a general **lack of noteworthy catalysts** in the month.



# The Month-Over-Month Report

- Volatility fell **29 percentage points** to 64% and XBTUSD declined -3% from the month prior, the smallest absolute MoM change in the last 12 months.
- After four months of consecutive growth, spot trading volume plummeted -38% (-\$19B) and posted **the largest absolute decline** since last September.
- Velocity fell -39% from 17.88x to 10.89x, representing the largest absolute and relative decline in a year.

	08/18	09/18	10/18	11/18	12/18	01/19	02/19	03/19	04/19	05/19	06/19	07/19	08/19
<b>Annualized Volatility</b>	52.9%	47.3%	27.6%	96.8%	90.1%	50.2%	53.0%	24.4%	74.1%	92.4%	100.3%	93.4%	64.2%
(% Change)	-16.6%	-10.7%	-41.6%	250.8%	-6.9%	-44.3%	5.5%	-53.9%	203.4%	24.6%	8.5%	-6.8%	-31.3%
<b>Volume*</b>	\$23,778M	\$17,716M	\$11,287M	\$18,367M	\$17,800M	\$9,978M	\$8,613M	\$7,512M	\$15,359M	\$34,252M	\$42,360M	\$50,761M	\$31,346M
(% Change)	12.9%	-25.5%	-36.3%	62.7%	-3.1%	-43.9%	-13.7%	-12.8%	104.5%	123.0%	23.7%	19.8%	-38.2%
<b>Closing Price</b>	\$7,016	\$6,604	\$6,308	\$3,969	\$3,692	\$3,410	\$3,794	\$4,095	\$5,272	\$8,552	\$10,752	\$10,090	\$9,765
(% Change)	-11.8%	-5.6%	-4.3%	-34.9%	-7.7%	-8.9%	11.3%	6.9%	28.1%	62.5%	25.7%	-6.2%	-3.2%
<b>Annualized Velocity**</b>	13.22x	12.27x	12.61x	13.8x	16.63x	13.98x	13.08x	15.17x	17.97x	18.02x	21.73x	17.88x	10.89x
(% Change)	5.7%	-7.2%	2.8%	9.4%	20.5%	-15.9%	-6.4%	16.0%	18.5%	0.3%	20.6%	-17.7%	-39.1%

\*Coinbase, Binance, Bitstamp, Bitfinex, Bittrex, Gemini, Kraken, Poloniex

sources: Kraken, CoinMarketCap, CoinMetrics.io

\*\* $(\text{Total Monthly Tx Volume} / \text{Average Market Capitalization}) * 12$

# Correlations - Traditional Financial Assets

- Bitcoin's 1-month correlation with traditional financial assets became more **inversely correlated** in August.
- 1-month correlation between bitcoin and the S&P500 weakened to -0.04, while most assets became significantly more inversely correlated:
  - Gold: -0.35 → -0.38
  - Crude oil: 0.48 → -0.57
  - U.S. high yield debt: -0.10 → -0.61
  - U.S. investment grade debt: -0.28 → -0.70
  - U.S. 10-Year Treasury: 0.20 → -0.59
- Notably, short-term correlation between bitcoin and gold is negative as gold continues to post steady, positive performance in 3Q2019; longer-term correlation between the two assets remains positive.
- With the exception of crude oil and the S&P500, 1-year and 2-year correlations traditional financial assets are **more positively correlated**.

BTCUSD Correlation - July					
	1 Mo.	3 Mo.	6 Mo.	1 Year	2 Year
<b>S&amp;P500</b>	-0.38	0.55	0.72	0.67	0.29
<b>Gold</b>	-0.35	0.85	0.75	0.43	0.29
<b>Oil</b>	0.48	-0.23	-0.12	0.26	0.17
<b>U.S. HY Corp. Bond</b>	-0.10	0.59	0.62	0.58	0.28
<b>U.S. IG Corp. Bond</b>	-0.28	0.85	0.93	0.70	0.38
<b>U.S. 10 Yr. T-Bond</b>	0.20	0.82	0.93	N/A	N/A

sources: Kraken, Bloomberg



BTCUSD Correlation - August					
	1 Mo.	3 Mo.	6 Mo.	1 Year	2 Year
<b>S&amp;P500</b>	-0.04	0.38	0.56	0.67	0.26
<b>Gold</b>	-0.38	0.46	0.78	0.64	0.34
<b>Oil</b>	-0.57	0.53	-0.51	0.12	0.07
<b>U.S. HY Corp. Bond</b>	-0.61	0.30	0.42	0.59	0.38
<b>U.S. IG Corp. Bond</b>	-0.70	0.39	0.86	0.78	0.49
<b>U.S. 10 Yr. T-Bond</b>	-0.59	0.24	0.86	N/A	N/A

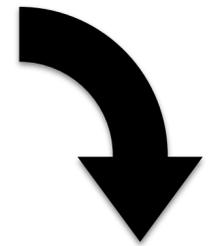
sources: Kraken, Bloomberg

# Correlations - Crypto Assets

- Bitcoin's 1-month correlation with the top 5 largest altcoins by market capitalization remain significantly positively correlated; excluding ETH and LTC, 1-month correlations grew slightly more positive month-over-month.
- Medium-term correlations suggest weaker relationship between bitcoin and altcoins, capturing the decoupling of bitcoin performance and dominance year-to-date in 2019.
- Stronger 1-month correlations in August likely stem from a **general decline in volatility across crypto assets, resulting in range-bound markets.**

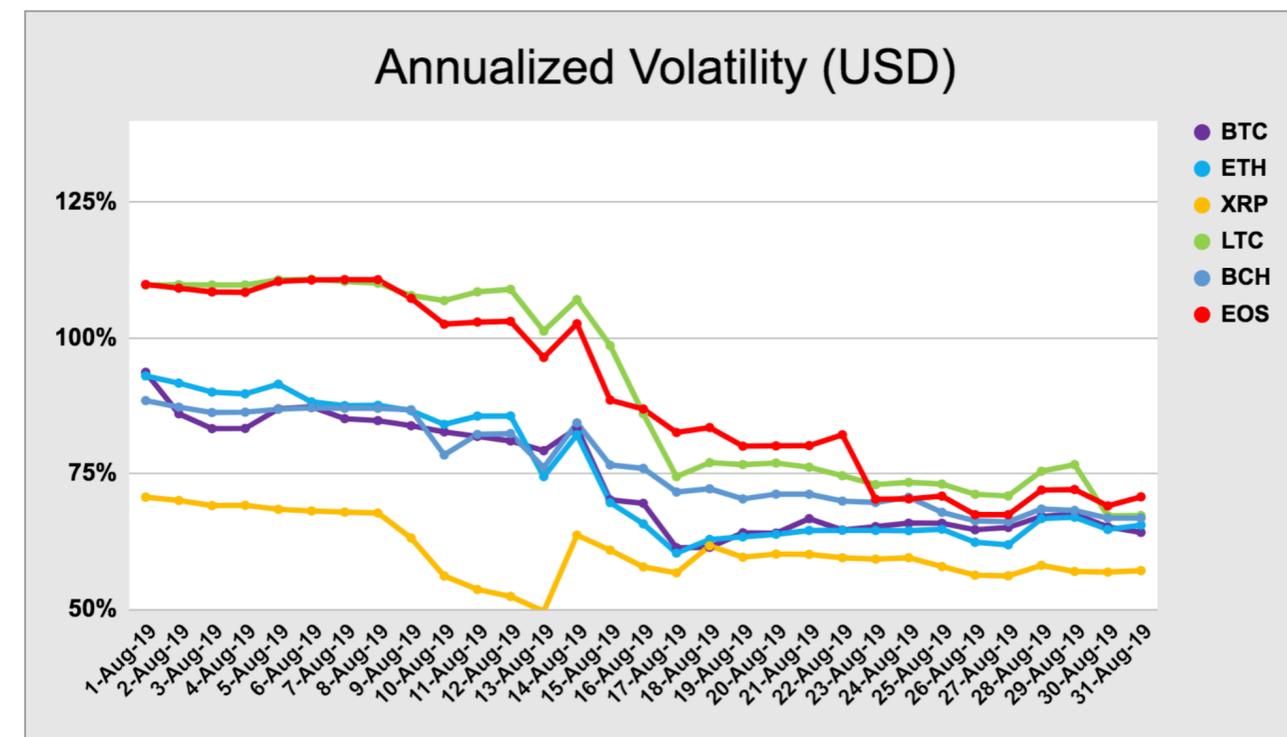
BTCUSD Correlation - July					
	1 Mo.	3 Mo.	6 Mo.	1 Year	2 Year
ETH	0.88	0.74	0.94	0.78	0.71
XRP	0.74	0.29	0.65	0.36	0.65
BCH	0.79	0.38	0.85	0.64	0.79
LTC	0.78	0.54	0.87	0.84	0.88
EOS	0.72	-0.01	0.64	0.73	0.58

sources: Kraken, Bloomberg



BTCUSD Correlation - August					
	1 Mo.	3 Mo.	6 Mo.	1 Year	2 Year
ETH	0.87	0.26	0.79	0.84	0.66
XRP	0.80	-0.13	0.26	0.15	0.59
BCH	0.80	0.01	0.72	0.61	0.74
LTC	0.77	-0.09	0.65	0.80	0.84
EOS	0.82	-0.25	0.22	0.57	0.51

sources: Kraken, Bloomberg



source: Kraken

# The Macro Trend

**Economic indicators out of the U.S., Europe, and China continue to suggest the global economy is slowing,** which could translate into further interest in the crypto asset class if traditional financial assets underperform.

**United States:** For the third time in six months, U.S. industrial production fell, posting a month-over-month decline of -0.2% in July. Consumer prices were also up +1.8% in July vs. the year prior, and core prices advanced +2.2%, higher than the Fed's +2% target. The University of Michigan's consumer sentiment index saw the largest monthly decline since December 2012, coming in at 89.8 for August vs. 98.4 in July. However, retail sales were up a staggering +0.7% over the same period of time.

**Europe:** Gross domestic product (GDP) growth in the eurozone was +0.2% QoQ, a slowdown from +0.4% in the first three months of 2019. Eurozone industrial production fell by -1.6% in June compared with May. Three of the four largest economies in Europe posted zero growth and the five largest economies experienced a decline. Britain's real 2Q GDP fell for the first time in seven years and June manufacturing output slumped -1.4% from a year earlier and -0.2% from the previous month.

**China:** Exports grew +3.3% year-over-year in July, largely due to strong exports to other Asian countries, including South Korea, Taiwan, and Singapore. However, China's export growth is expected to fall as U.S. exports decline further in the months to come. Exports to the United States were down -6.5% in July from a year earlier.

# Key Events

## **The U.S. Government Labels China a “Currency Manipulator” (August 5th)**

- U.S. Treasury Secretary Steven Mnuchin classified China a “currency manipulator” and stated that he would engage with the IMF to eliminate the “unfair competitive advantages.” The last time the U.S. labeled another country a “currency manipulator” was more than 25 years ago.
- Before Mnuchin’s statement, the People’s Bank of China stated that it would “continue to [...] take necessary and targeted measures against the positive feedback behavior that may occur in the foreign exchange market.”

## **SEC Delays Decision On 3 Pending BTC ETF Proposals (August 12th)**

- The SEC delayed making a decision on three BTC ETF proposals by asset managers Bitwise, VanEck/SolidX, and Wilshire Phoenix; final decisions on the Wilshire Phoenix application is scheduled for September 29th, while Bitwise and VanEck/SolidX decisions are expected by Oct. 13th and Oct. 18th, respectively.

## **U.S. Yield Curve Inverts For The First Time In More Than A Decade (August 14th)**

- The 2-yr/10-yr yield curve inverted for the first time in a decade, as yields on the 10-yr U.S. Treasury fell below the yield on the 2-yr U.S. Treasury.
- In the past 50 years, the yield curve has inverted within 24 months of a recession, making it a longstanding recession indicator.

## **\$3B Ponzi Scheme Allegedly Begins Dumping Bitcoin by the Hundreds (August 14th)**

- News of Chinese police hunting down a core team member of \$3B ponzi scheme “PlusToken” took the crypto industry by storm after Primitive Ventures founding partner Dovey Wan called attention to the scam and suggested that the recent BTC sell-offs were driven by remaining members.
- PlusToken was created in mid-2018 and promised high returns at different rebate percentages to its four tiers of member, and by early-2019, the project claimed to have 10M+ members; PlusToken managed to allegedly amass 1% of outstanding BTC and ETH supply.

## **U.S. - China Trade War Heats Up (August 23rd)**

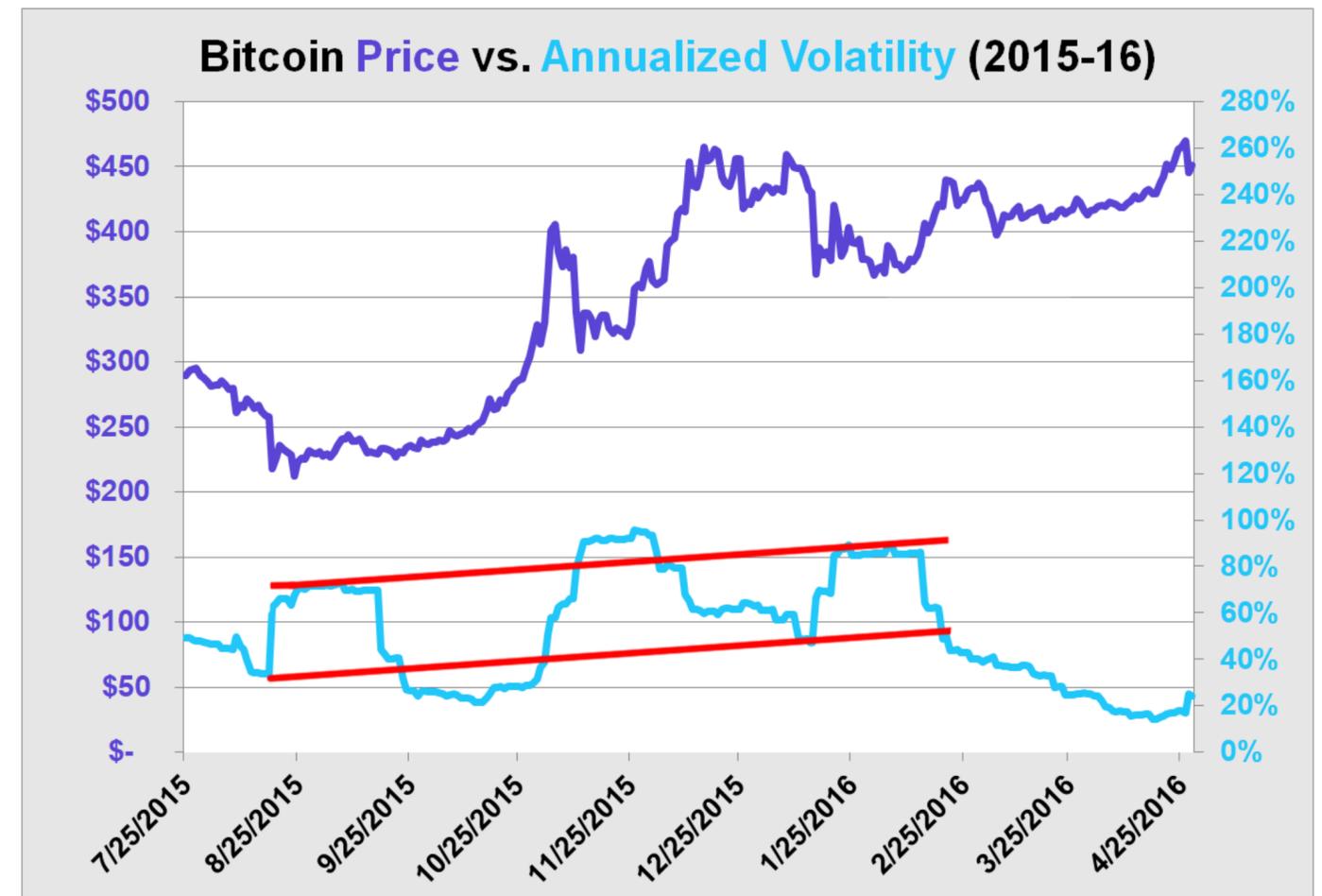
- Donald Trump tweeted that the existing 25% tariff on \$250 billion worth of Chinese goods would be hiked to 30% as of October 1st, while the planned 10% tariff on the remaining \$300 billion in goods would increase from 10% to 15%.
- Trump’s tweet came after China's State Council said it plans on imposing additional tariffs of 5% or 10% on \$75 billion worth of American products, a retaliatory move against a previous round of tariffs announced by the United States.

# Where to Next?

Assuming history repeats itself, **we may be due for a protracted low-volatility environment** while the market digests recent price action, expectations reset, and volatility mean reverts lower.

## Why?

- In August 2015, a wave of volatility set the stage for the 2015 bull cycle, consisting of a euphoric movement higher in prices with several snap drawdowns.
- After the third and final wave of volatility, the market entered a grind higher as volatility declined significantly from a high of 80% to a low of 20%.
- This 6-month period closely follows the **market life cycle of emotion**, characterized by optimism-turned-euphoria, euphoria-turned-fear, and fear-turned-relief.



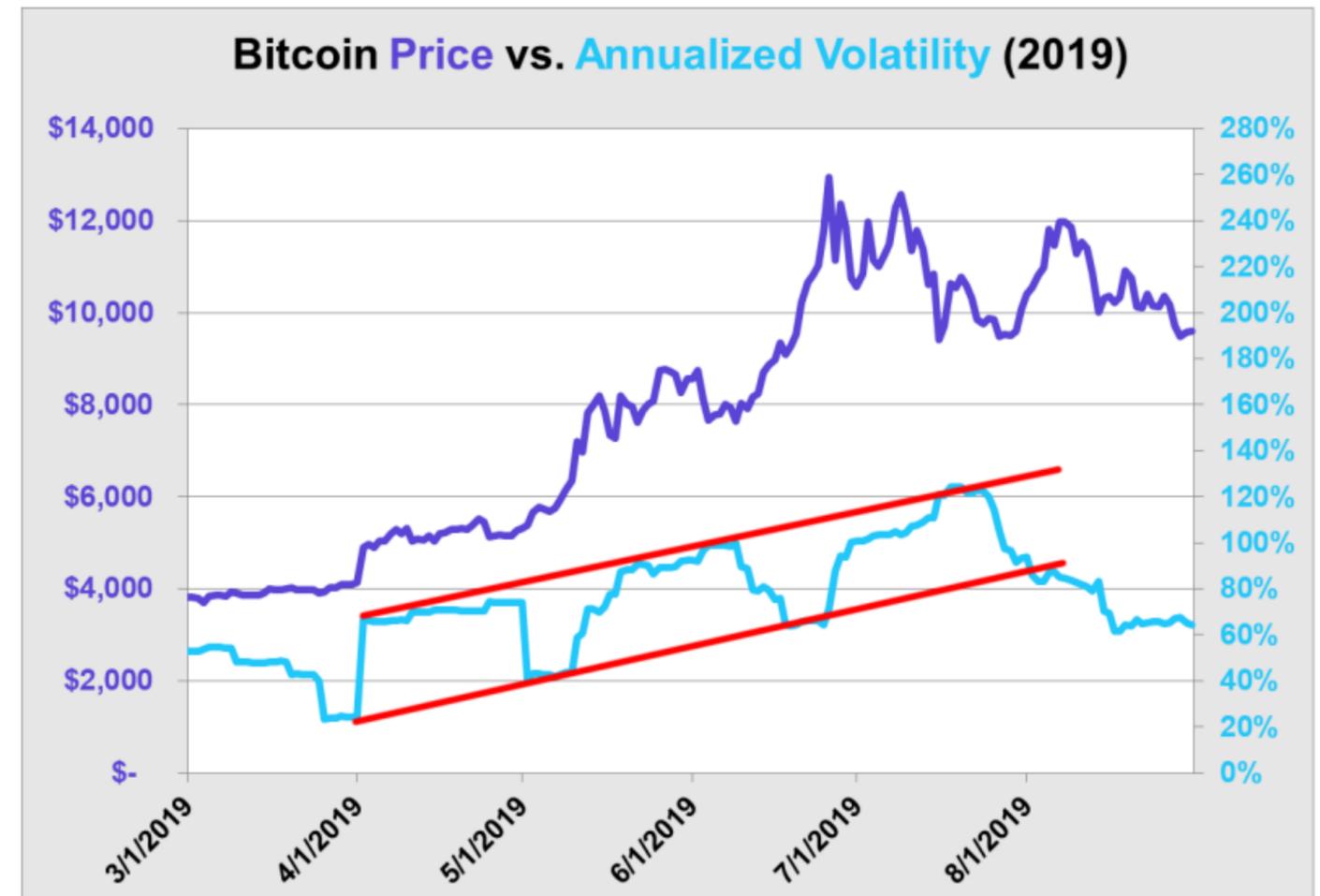
source: Kraken

# Where to Next?

## Where to Next?

- Looking to 2019, we observe a similar trend in bitcoin volatility beginning in April 2019 when a spike in volatility led a ramp up in bitcoin's market value.
- Interestingly, observations over the last four months indicate a stronger upward trend in volatility, coupled with higher absolute levels than the 2015 cycle.
- After a third wave of volatility in July, volatility drifted down to April levels, suggesting we may have topped out after a flood of animal spirits followed by a string of regulatory and macroeconomic events during the summer.

Despite ongoing uncertainty in the macroeconomic picture, we see a lack of binary catalysts taking place in the short-run; **don't be surprised if bitcoin enters a grind as volatility greets us back down on earth.**



source: Kraken

# What's Ahead?

Date	Upcoming Notable Catalysts
Sep-06-2019	Bakkt warehouse begins offering BTC storage
Sep-12-2019	US clients lose access to Binance.com
Sep-23-2019	Bakkt launches with daily and monthly physically delivered BTC futures contracts
Sep-29-2019	Soft deadline for SEC decision on NYSE's BTC Investment Trust proposal
Oct-13-2019	Deadline for SEC decision on Bitwise<>NYSE Arca BTC ETF
Oct-18-2019	Deadline for SEC decision on VanEck<>SolidX BTC ETF
Oct-28-2019	Submission deadline for Mt. Gox payout

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