



“Wait-and-See”

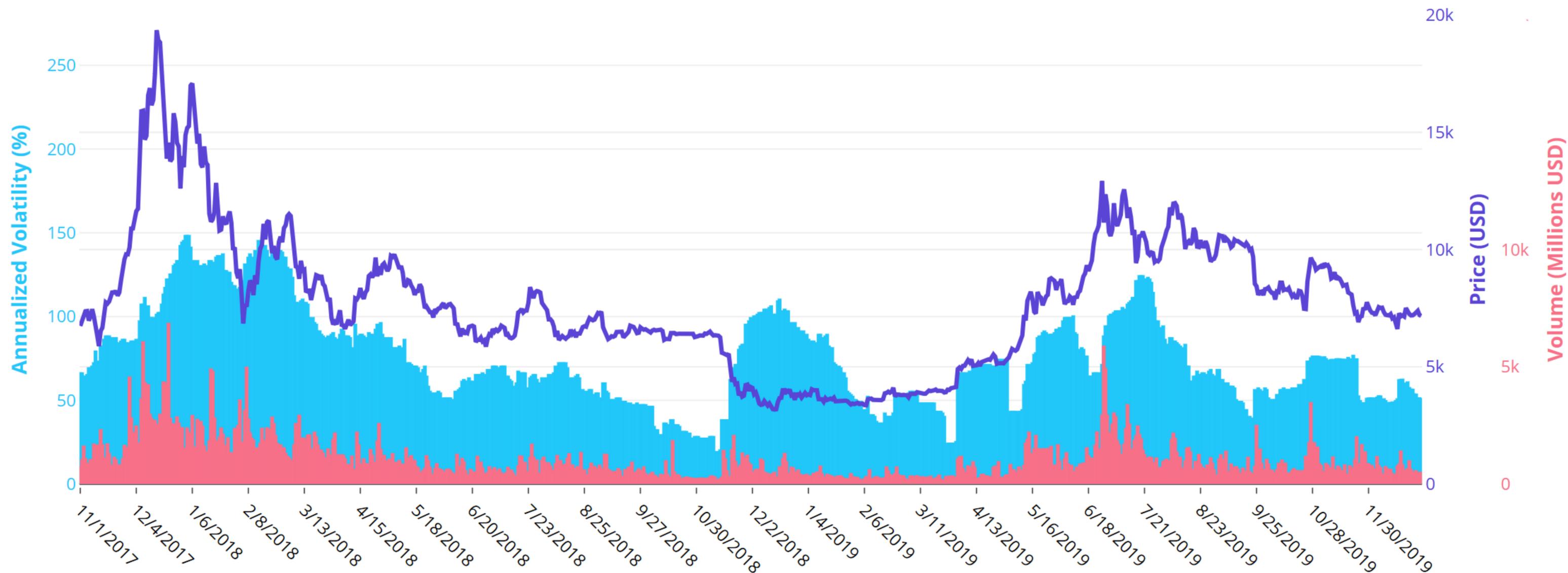
December 2019 Volatility Report

December 2019 Takeaways

- While bitcoin trading volumes and price fell **-18.8%** and **-5.2%** MoM, respectively, bitcoin's annualized volatility was virtually flat MoM at 50.6%, the **lowest level since last March**.
- In 2019, bitcoin posted a strong, positive correlation with **gold (0.70)**, **US investment grade corp. bonds (0.78)**, and the **US 10 Year T-bond (0.82)**, which suggests that bitcoin continues to mature as an **alternative** to traditional "risk-on" financial assets.
- Crypto ponzi schemes were front and center in December – market participants were spooked by rumors that two BitClub Network mining conspirators remained at large and by **790,000 ETH** having been moved from a PlusToken wallet to an unknown wallet.
- Monthly returns and annualized volatility for 2019 expressed a relatively **strong positive correlation with 2011 and 2016**, which may be indicative of 2019 having been the early innings of a bull market.
- Historical trends in bitcoin wallets with balances ranging between ₿10 - ₿100 and ₿1,000 - ₿10,000 suggest that market participants are back in an **accumulation** phase while whales are in a **wait-and-see** phase.

Volatility Trends

- Staying true to the trend, December was comparatively less volatile than November and mostly saw sideways price action alongside falling trading volumes.
- On December 18 bitcoin fell to \$6,430, its lowest level since May 11; the plunge was subsequently met with a +13% rally later that day, bringing volatility to a local, 4-week high of 62.2% on December 20.
- Bitcoin's intra-month price range of \$6,430 - \$7,800 marked the narrowest absolute dollar trading range since March.



The Month-Over-Month Report

- December concluded with annualized volatility falling 0.6 percentage points to a reading of 50.6%, which marked a second month of declines and the lowest level since March, when volatility fell to a 1-year low of 24.4%.
- Trading volumes fell -18.8% and the price of bitcoin sunk -5.2% in December, marking two months of back-to-back declines and an 8-month low.
- On the contrary, annualized velocity closed out the month +10% higher MoM and continues to trend higher after hitting a 1-year low of 10.4x in October.

	12/18	01/19	02/19	03/19	04/19	05/19	06/19	07/19	08/19	09/19	10/19	11/19	12/19
Annualized Volatility	90.1%	50.2%	53.0%	24.4%	74.1%	92.4%	100.3%	93.4%	64.2%	56.6%	75.8%	51.2%	50.6%
(% Change)	-6.9%	-44.3%	5.5%	-53.9%	203.4%	24.6%	8.5%	-6.8%	-31.3%	-11.8%	34.0%	-32.5%	-1.2%
Volume	\$17,800M	\$9,978M	\$8,613M	\$7,512M	\$15,359M	\$34,252M	\$42,360M	\$50,761M	\$31,346M	\$23,350M	\$26,837M	\$23,323M	\$18,949M
(% Change)	-3.1%	-43.9%	-13.7%	-12.8%	104.5%	123.0%	23.7%	19.8%	-38.2%	-25.5%	14.9%	-13.1%	-18.8%
Closing Price	\$3,692	\$3,410	\$3,794	\$4,095	\$5,272	\$8,552	\$10,752	\$10,090	\$9,765	\$8,310	\$9,236	\$7,559	\$7,168
(% Change)	-7.0%	-7.6%	11.3%	7.9%	28.7%	62.2%	25.7%	-6.2%	-3.2%	-14.9%	11.1%	-18.2%	-5.2%
Annualized Velocity	16.63x	13.98x	13.08x	15.17x	17.97x	18.02x	21.73x	17.88x	10.89x	11.15x	10.4x	11.13x	12.24x
(% Change)	20.5%	-15.9%	-6.4%	16.0%	18.5%	0.3%	20.6%	-17.7%	-39.1%	2.3%	-6.7%	7.0%	10.0%

Correlations – Traditional Financial Assets

1-Month & 3-Month

- December and the prior three months had exhibited a relatively weak correlation between bitcoin and traditional financial assets.

6-Month

- The most notable correlation in 2H2019 was with the S&P500 (**-0.68**). However, when considering bitcoin's -32% return in 2H2019, it's no surprise that the S&P500 was notably negatively correlated with bitcoin; over the past 6 months, the S&P500 appreciated +9% on the back of improving trade discussions, earnings growth, and lower interest rates.

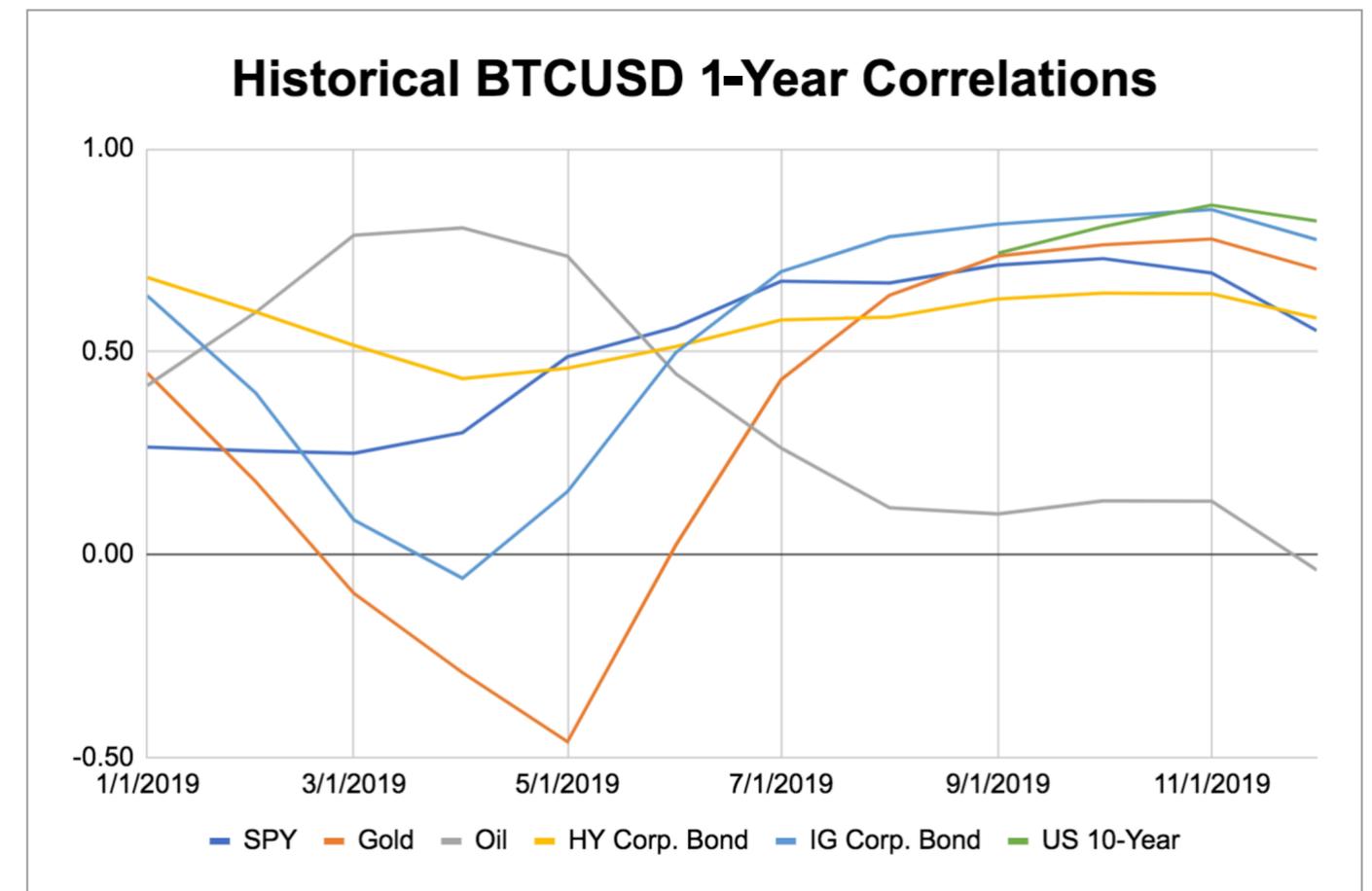
1-Year

- 2019 concluded with bitcoin posting a strong positive correlation with gold (**0.70**), US investment grade corp. bonds (**0.78**), and the US 10 Year T-bond (**0.82**), all of which are considered alternatives to traditional "risky assets."
- Oil was the standout for the year with a correlation of **-0.04**, or virtually no relationship.
- By analyzing historical 1-year correlations we found that traditional financial assets turned substantially more positively correlated with BTC. This is particularly true for the US 10 Year T-bond, US investment grade corp. bonds, and gold.

2-Year

- As of year-end, the only correlations that stood out were US high yield corp. bonds (**0.61**) and US investment grade bonds (**0.53**).

BTCUSD Correlation - December					
	1 Mo.	3 Mo.	6 Mo.	1 Year	2 Year
S&P500	-0.27	-0.55	-0.68	0.55	0.30
Gold	-0.12	0.21	-0.15	0.70	0.46
Oil	-0.30	-0.58	-0.24	-0.04	0.02
U.S. HY Corp. Bond	-0.45	-0.45	-0.39	0.58	0.61
U.S. IG Corp. Bond	-0.26	-0.70	-0.57	0.78	0.53
U.S. 10 Yr. T-Bond	0.28	0.29	-0.05	0.82	N/A



Correlations – Crypto Assets

1-Month

- Of the 5 largest altcoins by market capitalization, EOS exhibited an abnormally highly positive correlation (**0.81**) with bitcoin relative to peers and the group average of **0.59**.

3-Month and 6-Month

- 3-month and 6-month correlations were strongly positive across all assets, though Bitcoin Cash (BCH) stands out with a correlation of **0.91** and **0.94** across both time horizons.

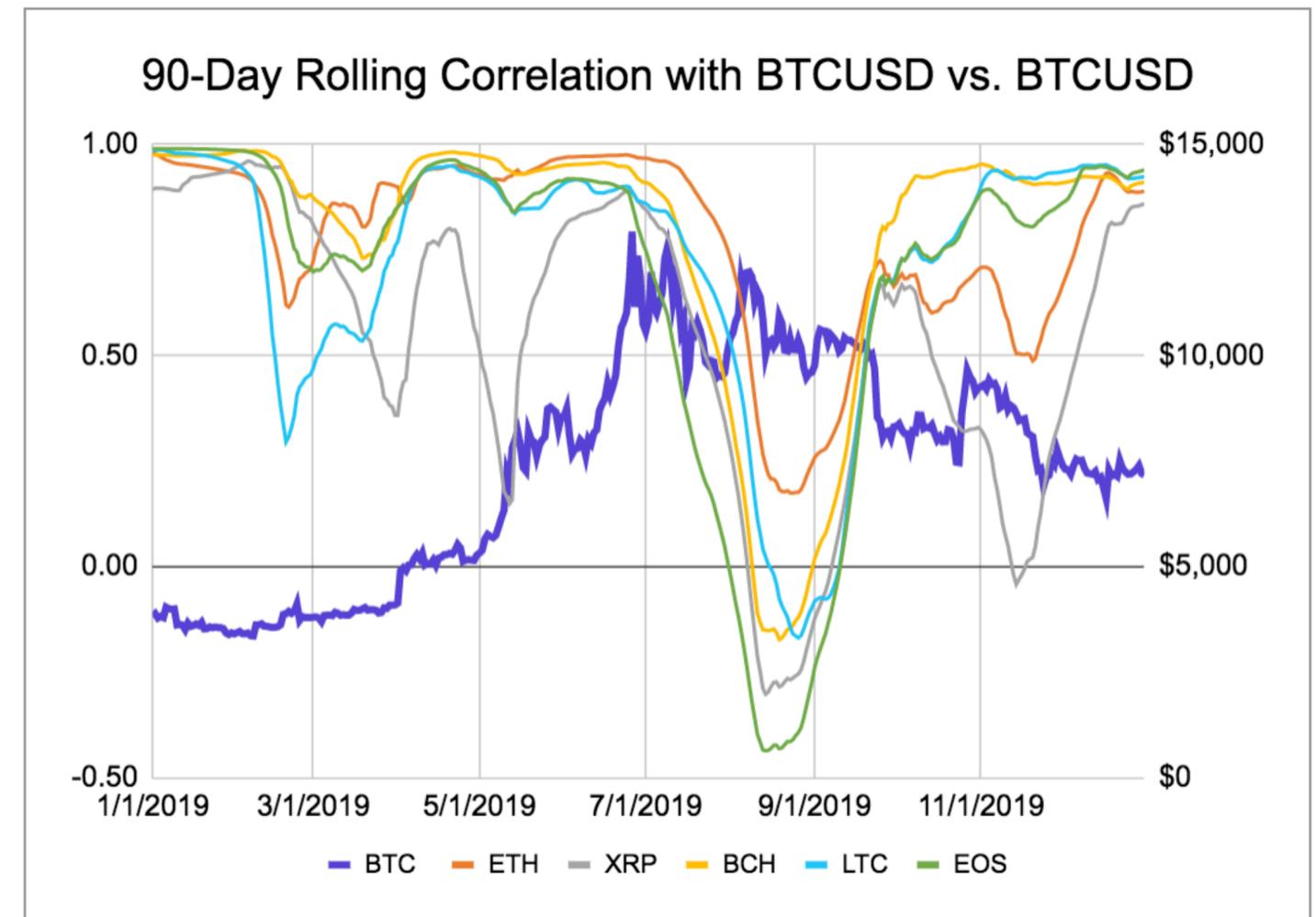
1-Year & 2-Year

- With the exception of XRP (**0.07**) and EOS (**0.33**), bitcoin retained a relatively strong correlation amongst the top 5 altcoins over the past year. The same is true when looking as far back as 2017, though on the whole correlations were not nearly as strong.

90-Day Rolling Correlations

- By analyzing bitcoin's 90-day rolling correlation relative to its price, we can see that the top 5 altcoins followed in bitcoin's footsteps throughout most of 2019; there were, however, a few exceptions:
 - In 1Q2019 LTC outperformed relative to BTC, as market participants braced for the LTC halving.
 - XRP briefly deviated away from BTC in late-2Q and mid-4Q.

BTCUSD Correlation - December					
	1 Mo.	3 Mo.	6 Mo.	1 Year	2 Year
ETH	0.48	0.89	0.84	0.76	0.58
XRP	0.43	0.86	0.78	0.07	0.55
BCH	0.56	0.91	0.94	0.76	0.60
LTC	0.65	0.92	0.89	0.61	0.72
EOS	0.81	0.94	0.86	0.33	0.43



The Macro Trend

North America: US retail sales were up, the Conference Board's Consumer Confidence Index fell for the fourth straight month, unemployment returned to a 50-year low of 3.5%, and CPI inflation remained unchanged YoY at 2.3%. The ISM manufacturing index remained in negative territory for the fourth straight month, yet the ISM non-manufacturing index remained in expansionary territory. The FOMC left US interest rates unchanged and reiterated that it would need to see a material shift in their outlook to adjust rates. The FOMC also released its members' median GDP growth forecast for 2020, calling for 2%, and the Fed dot plot, which plots individual members' forecasts of rates. The committee's dot plot revealed that most members expect rates to remain unchanged in 2020 and a 25 bps rate hike in 2021. The US and China finally reached a phase I trade deal, though a 25% tariff on approximately \$250B worth of Chinese imports persists. On December 31st, Donald Trump tweeted that he would be signing the phase I deal with China on January 15th. The S&P 500 finished 2019 with a gain of +28.9%, while the Nasdaq composite rose +35.3%. Technology stocks powered those gains, vaulting +48% higher for the year. The Canadian jobs report was a significant disappointment to the market and unemployment jumped to 5.9%, Canada's worst employment result since 2009. The Bank of Mexico chose to once again cut interest rates by 25 bps.

Europe: the Eurozone posted solid 3Q GDP results with underlying final domestic demand rising 0.4% QoQ, though retail sales and German industrial output both registered large declines. The ECB held its monetary policy steady, made minimal changes to its economic projections, and indicated that rates will stay flat or move lower until inflation outlook reaches close to, but below 2%. The Governing Council stated that they would continue purchasing assets until shortly before rates go higher. Christine Lagarde, the new President of the ECB, said that downside growth risks still remain but are less pronounced, noting initial signs of stabilization in growth and mildly higher inflation. Eurozone manufacturing PMI gave up last month's gains and remains in contractionary territory, signaling contraction in 11 of the last 12 months. However, services PMI rose and finished the year without having fallen into contractionary territory once. German industrial output slumped 1.7% MoM, the U.K.'s Conservative Party leader Boris Johnson secured his position as prime minister, and the Bank of England held rates steady while noting that "GDP growth was projected to pick up from current below-potential rates, supported by the reduction of Brexit-related uncertainties, an easing of fiscal policy, and a modest recovery in global growth." The UK FTSE 100 closed out the year +12% higher while the Europe-wide Stoxx 600 rose +23%.

Asia: Chinese retail sales and industrial production accelerated to their fastest pace since June, a significant and encouraging sign given the US-China trade war. On the other hand, industrial production plunged -4.5% MoM in Japan, the largest monthly decline since the 2011 earthquake and tsunami. It's believed that the increase in Japan's value-added tax rate on October 1 may also have temporarily dampened demand and output for durable goods. The Bank of Japan acknowledged a slowdown in industrial production but indicated that the "increasing trend" in business fixed investment and corporate profits at "high levels" are reasons not to be worried. Gross fixed capital formation rose 4.9% YoY in Q3-2019, a reasonably strong reading given ongoing global growth challenges and weak economic growth. With respect to Korea, industrial production growth remains on a downtrend since the end of 2018 and posted a -2.6% YoY loss last month. The industrial slowing in Korea appears eerily similar to 2015 when fears about a significant slowdown in the global economy and China were swirling, much like the last few months. In 2019, China's CSI 300 index advanced +36%, Japan's Nikkei posted a return of +18%, and South Korea's KOSPI climbed +7.1%.

Key Events

1. Institutions Point to Upside

- A. December 6: a State Street survey of 101 primarily US-based asset managers, 71% of whom had AUM exceeding \$100B, found that 94% of respondents hold digital assets or related products (e.g. BTC futures). Of funds with AUM larger than \$500B, 69% plan to increase their allocation. Among all clients surveyed, 38% plan to increase their allocation in 2020 while 45% indicated intent in maintaining their allocation.
- B. December 7: Deutsche Bank releases “Image 2030” research report and suggests that crypto could replace fiat currencies by 2030 because the existing fiat system looks “fragile.” The bank pointed out that uncertainty surrounding fiat systems is driven in part by “decades of low labor costs” and inflation. The report stated, “If one of the GAFA [Google, Apple, Facebook and Amazon] (or their Chinese counterparts BATX [Baidu, Alibaba, Tencent and Xiaomi]) for example are able to overcome regulatory hurdles...this would broaden the appeal of cryptocurrencies, hasten their adoption, and give them the potential to eventually replace cash [...] demand for alternative currencies, from gold to crypto, could take off [in the next decade].” The report estimates the number of blockchain wallet users to increase to 200M by 2030.



2. Crypto Scams Heat Up

- A. December 10: four men were arrested in connection with the BitClub Network mining scheme, which defrauded investors of \$722M over five years. According to the US Department of Justice, “The indictment describes the defendants’ use of the complex world of cryptocurrency to take advantage of unsuspecting investors. What they allegedly did amounts to little more than a modern, high-tech Ponzi scheme that defrauded victims of hundreds of millions of dollars.” The defendants are being indicted on conspiracy to commit wire fraud and selling unregistered securities while two remain at large.
- B. December 16: Chainalysis reported that they’ve tracked \$2B worth of crypto that victims sent to PlusToken, a Chinese high-yield ponzi scheme that guaranteed investors substantial returns. Chainalysis was able to track 800,000 ETH and 45,000 BTC, some of which were transferred to the scammers’ addresses. The report also suggested that PlusToken had successfully cashed out at least 10,000 ETH while 790,000 ETH remains untouched in a single wallet. It’s believed that only 25,000 BTC has been cashed out and the remaining 20,000 BTC is spread out across more than 8,700 cryptocurrency addresses for obfuscation. Chainalysis concluded that PlusToken cash-outs correlated with drops in bitcoin’s price and could have been the catalyst for several sell-offs since July.
- C. December 18: Whale Alert (@whale_alert) tweeted that 789,525 of ETH (\$106M USD) had been transferred from the PlusToken wallet to an unknown wallet, raising concerns over the potential of both large amounts of ETH and BTC to hit the market.

Key Events

1. Regulators Firm Up

A. December 5: EU ministers said they could consider rules to regulate crypto assets and stablecoins as part of a global plan and that private digital currencies shouldn't be allowed in the EU until risks are addressed. A joint statement by the ministers read, "No global stablecoin arrangement should begin operation in the European Union until the legal, regulatory and oversight challenges and risks have been adequately identified and addressed."

B. December 11: Congress proposed the Crypto-Currency Act of 2020 and published a discussion draft to clarify which Federal agencies regulate digital assets. Under the act, each regulator is required to make available to the public a list of all Federal licenses, certifications, or registrations required to create or trade in digital assets.

C. December 11: the New York State Department of Financial Services (NYDFS) proposed modifications for the approval process for listing new cryptos with its virtual currency licenses (i.e., BitLicense and trust charter) to accommodate for the "exponential and continued growth in the number of coins available in the market." The framework examines how an exchange approaches an asset's governance, risk, and monitoring, with each category including concerns the regulator would like addressed before approval.

D. December 26: France's AMF releases rules and guidelines to apply for a digital asset service provider (DASP) license, as well as how to apply for non-mandatory licenses. The rules and guidelines expand upon France's PACTE law, which was passed in May and is one of the first crypto legislative packages passed in Europe. To apply for a DASP, AMF must receive a two-year business plan, a list of digital assets the firm is going to service, the list of geographies the firm will operate in and the firm's organizational chart. Licensed DASPs are also required to have: 1) professional indemnity insurance or minimum reserves; 2) at least one effective senior manager; 3) resilient IT systems; 4) an internal control system; 5) a claims handling procedure; 6) an avoidance of conflicts of interests; and 7) procedures to prevent money laundering and terrorist financing.

E. December 27: the Beijing Local Financial Supervision and Administration Bureau, the Business Management Department of the People's Bank of China, the Beijing Banking and Insurance Regulatory Bureau, and the Beijing Securities Regulatory Bureau released a note asking firms to not engage with crypto businesses. According to Chinese authorities, cryptocurrency trading activities have resurged following the recent promotion of blockchain technology in China and has caused some platforms to have "seriously violated" 2017 rulings. Authorities also urged investors to report any businesses in violation of laws & regulations.



2019 in Review

Monthly Returns

- Despite December posting greater returns than November, the month's -5% loss was well below the average and median return of +9% and +8%, respectively.
- Looking historically, monthly returns in 2019 exhibited a relatively strong positive correlation with 2011 (**0.48**) and 2016 (**0.70**), as well as a moderately strong negative correlation with to 2012 (**-0.51**).

Monthly Annualized Volatility

- December is historically a less volatile month than November, though this year we saw a relatively flat MoM trend.
- Annualized volatility of 51% in December 2019 was substantially below its 9-year average of 83% and a median of 61%.
- Volatility in 2019 correlated positively with 2011 (**0.59**) and 2016 (**0.38**).

Connecting The Dots

- Both monthly returns and annualized volatility for 2011 and 2016 exhibited a relatively strong positive correlation with 2019; it's worth noting, both 2011 and 2016 were "prelude years" to massive bull market runs.
- Assuming history repeats itself, January should be considerably more volatile than December and post a return between -3% and +6%.

BTCUSD Monthly Returns

	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Correl to 2019
2011	75%	22%	-15%	352%	182%	68%	-13%	-37%	-38%	-35%	-6%	53%	0.48
2012	5%	-20%	-1%	3%	4%	27%	41%	6%	24%	-10%	19%	8%	-0.51
2013	54%	63%	171%	34%	10%	-31%	18%	33%	-3%	59%	451%	-24%	-0.34
2014	7%	-32%	-20%	-6%	36%	1%	-9%	-20%	-18%	-12%	17%	-15%	0.11
2015	-31%	12%	-6%	-4%	-1%	18%	10%	-18%	4%	32%	14%	19%	0.21
2016	-16%	18%	-4%	8%	17%	25%	-8%	-6%	6%	14%	2%	29%	0.70
2017	-3%	20%	-12%	27%	60%	2%	19%	74%	-12%	47%	49%	29%	0.16
2018	-25%	14%	-37%	36%	-18%	-15%	21%	-8%	-8%	-4%	-37%	-11%	0.31
2019	-10%	63%	7%	27%	61%	27%	-5%	-8%	-15%	10%	-18%	-5%	1.00
Average	6%	18%	9%	53%	39%	14%	8%	2%	-7%	11%	54%	9%	
Median	-3%	18%	-6%	27%	17%	18%	10%	-8%	-8%	10%	14%	8%	

BTCUSD Monthly Annualized Volatility

	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Correl to 2019
2011	146%	171%	60%	184%	232%	278%	69%	212%	161%	179%	124%	84%	0.59
2012	142%	95%	59%	35%	14%	46%	58%	164%	30%	47%	34%	25%	-0.24
2013	40%	59%	109%	321%	90%	58%	99%	40%	33%	106%	168%	210%	-0.03
2014	79%	85%	103%	115%	62%	52%	27%	54%	62%	61%	73%	46%	-0.50
2015	149%	74%	61%	44%	27%	34%	47%	72%	26%	37%	93%	61%	-0.51
2016	80%	40%	25%	25%	50%	90%	44%	57%	23%	27%	38%	37%	0.38
2017	92%	43%	97%	31%	88%	86%	129%	69%	109%	66%	88%	149%	-0.07
2018	121%	137%	83%	86%	54%	69%	64%	55%	45%	27%	97%	85%	-0.45
2019	50%	53%	24%	74%	92%	100%	93%	64%	57%	76%	51%	51%	1.00
Average	100%	84%	69%	102%	79%	90%	70%	88%	61%	70%	85%	83%	
Median	92%	74%	61%	74%	62%	69%	64%	64%	45%	61%	88%	61%	

Where to Next?

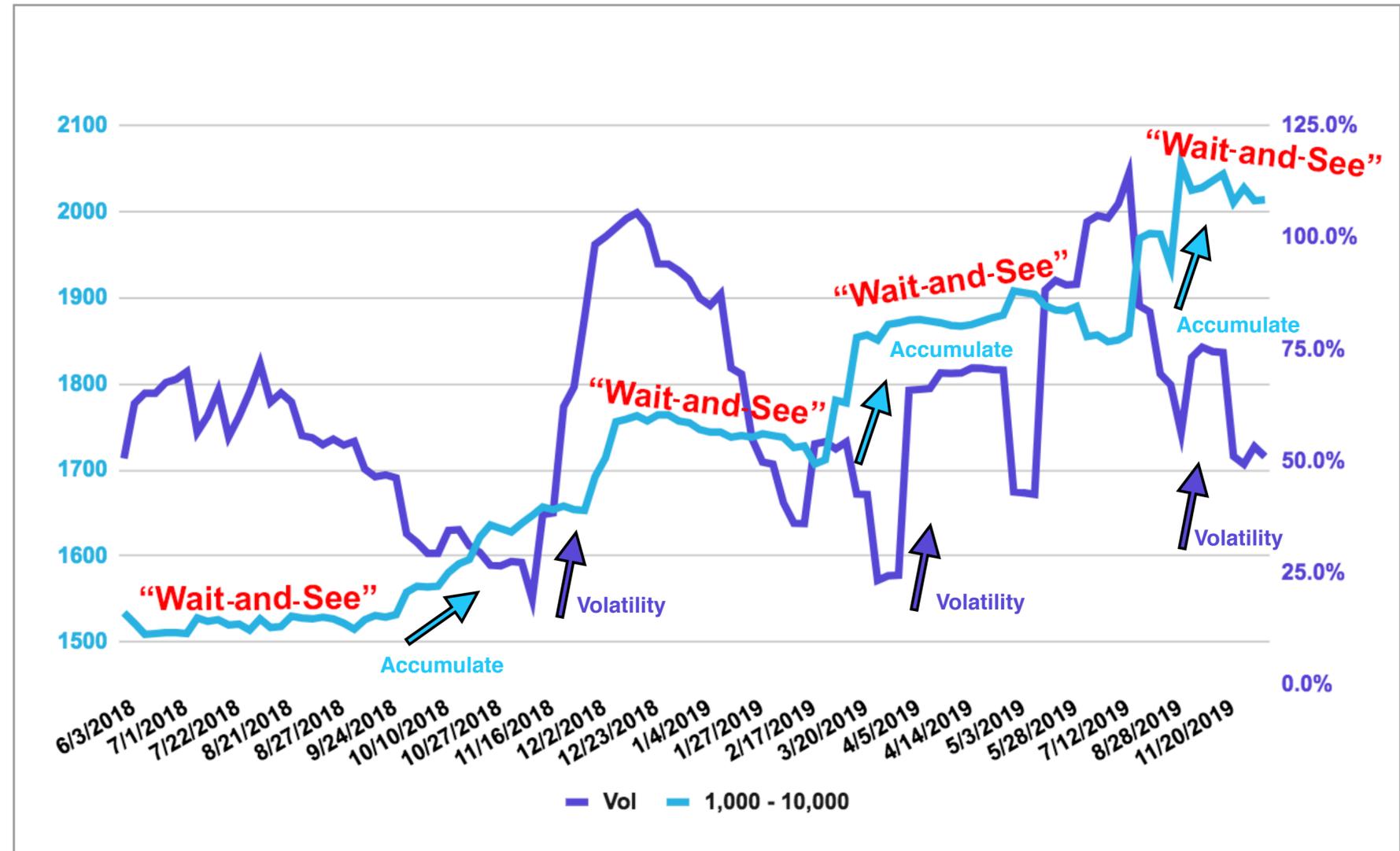
Bitcoin Distribution By Addresses

- Since 2018, roughly 50% of existing bitcoins have been held in wallets with balances between ₿10 - ₿100 or ₿1,000 - ₿10,000; these cohorts exhibit a correlation of 0.88.

The ₿1,000 - ₿10,000 Cohort

- At today's price, this cohort consists of bitcoin wallets with \$8M - \$80M worth of bitcoin. These addresses are referred to as "whales," individuals or groups with enough capital to impact the price of bitcoin immediately or over time.
- As seen in figure 1, this cohort appears to accumulate opportunistically, producing abrupt, periodic surges in the number of addresses prior to jumps in volatility.
- The stagnant growth in addresses suggests that the marginal whale is currently sidelined (wait-and-see); assuming the trend repeats, we may be due for another few months of dampened volatility before a new wave of whales start the next phase of accumulation.
- It's also worth noting that this cohort may likely return to the market through means other than spot exchanges, such as through an [OTC desk](#), which can result in a lag between accumulation periods and price volatility.

Figure 1: Number of bitcoin addresses with ₿1,000 - ₿10,000 relative to price volatility

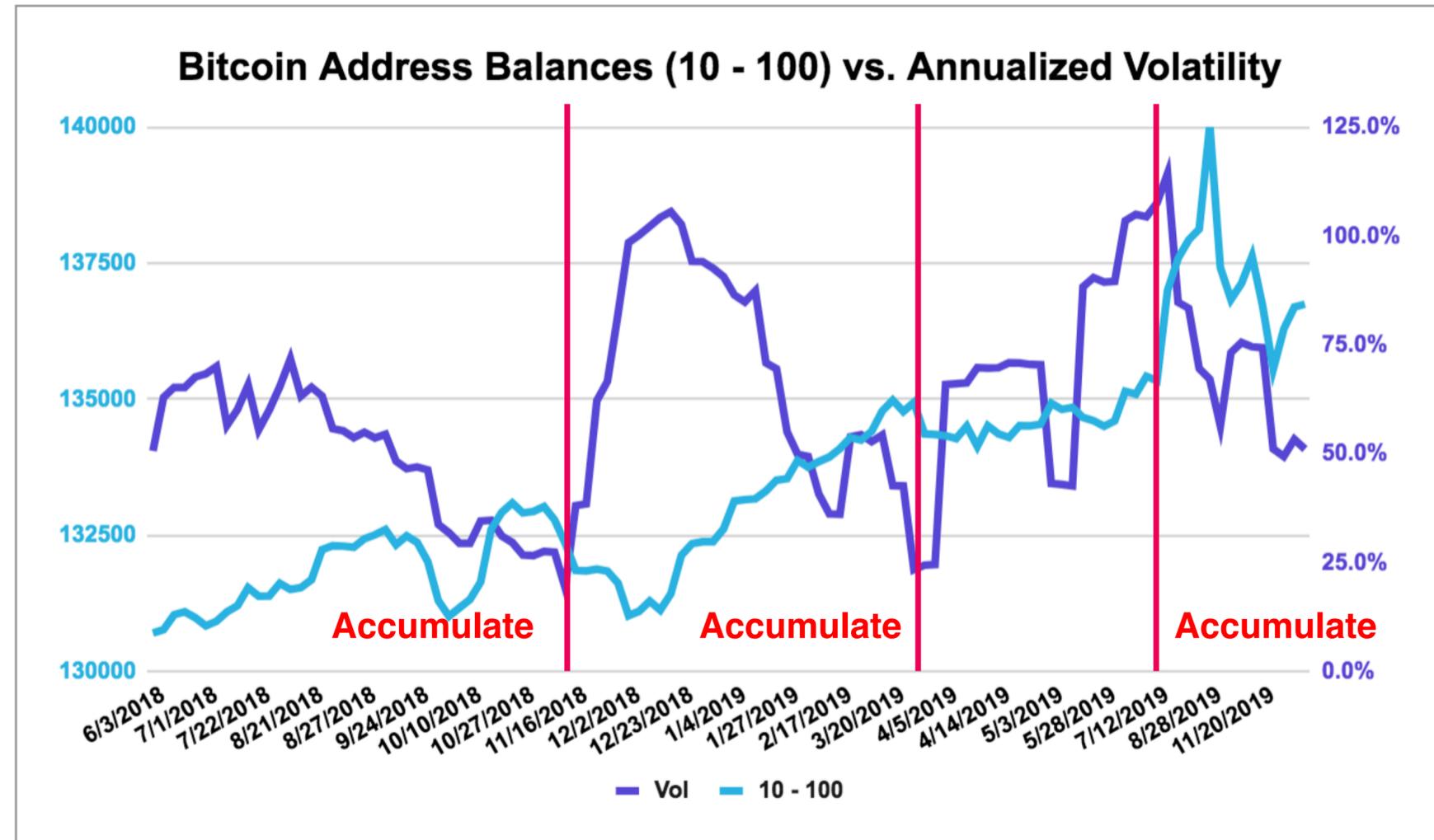


Where to Next? Pt. 2

The ₿10 - ₿100 Cohort

- The ₿10 - ₿100 cohort consists of HODL'ers with \$80,000 - \$800,000 worth of bitcoin – not whales per se, but this cohort has historically made up 25% of outstanding bitcoins.
- Prior observations suggest the number of addresses containing ₿10 - ₿100 tends to increase steadily before flatlining and pulling back modestly prior to increases in volatility.
- The reduction in the number of addresses is explained by either: 1) market participants selling after a volatile move; or 2) accumulation leading into the higher cohort (₿100 - ₿1,000).
- This cohort *also* influences market dynamics over time by contributing to market consolidation until conditions lead to sharp upticks in volatility.
- Since bottoming out in November, this cohort appears to have reentered an accumulation phase.

Figure 2: Number of bitcoin addresses with ₿10 - ₿100 relative to price volatility



Based on these observations, don't bet on January leading volatility for 1Q2020; instead, anticipate a slight uptrend at best.

What's Ahead?

Date	Upcoming Notable Catalysts
Jan-2020	Indian Supreme Court Follow-Up Hearing on Crypto Regulations
Jan-13-2020	CME Launches BTC Options
Feb-3-2020	Jan 2020 CME Futures BTCF20 Settlement Date
Feb-18-2020	Telegram<>SEC Court Hearing on TON
Feb-26-2020	Hard Deadline for SEC Decision on Wilshire/NYSE BTC Investment Trust Proposal
Mar-02-2020	Feb 2020 CME Futures BTCG20 Settlement Date
Apr-2020	Japan tightens rules on crypto margin trading
May-14-2020	Bitcoin halving @ block #630,000

BTCUSD - December							
Date	Price	24hr Return	Annualized Vol.	Tx Volume	Exchange Volume*	Market Cap	Velocity**
1-Dec-19	7398.4	-2.12%	51%	\$ 3,351,783,068.00	\$ 589,851,789	\$ 134,095,575,599.22	10.97x
2-Dec-19	7305.8	-1.25%	51%	\$ 4,377,409,165.16	\$ 770,754,524	\$ 132,311,649,481.68	11.10x
3-Dec-19	7294.1	-0.16%	51%	\$ 4,207,977,478.29	\$ 618,526,075	\$ 132,111,542,796.43	11.22x
4-Dec-19	7190.5	-1.42%	50%	\$ 12,770,788,140.70	\$ 464,287,120	\$ 130,473,486,507.88	11.91x
5-Dec-19	7394	2.83%	52%	\$ 3,861,161,925.53	\$ 1,147,250,208	\$ 133,905,907,021.29	11.70x
6-Dec-19	7545.7	2.05%	52%	\$ 13,436,065,746.60	\$ 758,627,410	\$ 136,272,863,879.85	12.52x
7-Dec-19	7509.2	-0.48%	52%	\$ 2,722,631,117.01	\$ 669,218,578	\$ 135,886,841,741.43	12.39x
8-Dec-19	7521	0.16%	50%	\$ 2,164,195,259.18	\$ 381,804,041	\$ 136,206,094,715.74	12.17x
9-Dec-19	7334.5	-2.48%	51%	\$ 4,213,189,311.32	\$ 398,068,616	\$ 132,805,669,774.65	12.23x
10-Dec-19	7219.3	-1.57%	49%	\$ 4,846,770,087.17	\$ 715,839,580	\$ 130,862,566,069.29	12.47x
11-Dec-19	7202	-0.24%	48%	\$ 3,748,066,434.07	\$ 625,140,918	\$ 130,302,159,494.61	12.58x
12-Dec-19	7190.1	-0.17%	48%	\$ 4,155,385,143.33	\$ 443,851,083	\$ 130,176,306,232.12	12.65x
13-Dec-19	7251.9	0.86%	48%	\$ 3,545,321,372.33	\$ 600,813,424	\$ 131,132,158,335.25	12.64x
14-Dec-19	7067.5	-2.54%	49%	\$ 2,249,958,831.32	\$ 416,051,835	\$ 127,999,800,420.61	12.51x
15-Dec-19	7113.7	0.65%	49%	\$ 2,243,970,714.57	\$ 390,394,472	\$ 128,738,145,823.28	12.28x
16-Dec-19	6876.7	-3.33%	49%	\$ 3,292,408,839.46	\$ 368,320,822	\$ 124,607,959,806.09	12.39x
17-Dec-19	6611.1	-3.86%	50%	\$ 7,341,408,470.38	\$ 733,857,465	\$ 119,669,002,105.72	12.92x
18-Dec-19	7287.9	10.24%	62%	\$ 5,434,439,539.73	\$ 830,004,529	\$ 131,915,496,849.08	13.05x
19-Dec-19	7149.8	-1.89%	62%	\$ 4,595,549,526.53	\$ 1,381,020,843	\$ 129,422,222,016.78	13.17x
20-Dec-19	7191.5	0.58%	62%	\$ 4,499,629,902.26	\$ 791,673,222	\$ 130,125,371,827.73	13.32x
21-Dec-19	7143.5	-0.67%	59%	\$ 3,064,041,738.50	\$ 563,703,383	\$ 129,345,551,109.72	13.22x
22-Dec-19	7510	5.13%	60%	\$ 3,064,762,823.58	\$ 361,686,351	\$ 135,504,182,500.01	12.90x
23-Dec-19	7324	-2.48%	61%	\$ 4,261,300,901.53	\$ 630,159,652	\$ 132,661,061,513.21	12.80x
24-Dec-19	7253.3	-0.97%	57%	\$ 3,229,394,315.15	\$ 965,537,054	\$ 131,111,985,464.01	12.73x
25-Dec-19	7192.1	-0.84%	56%	\$ 2,799,094,140.52	\$ 596,934,031	\$ 130,317,953,564.19	12.44x
26-Dec-19	7195.5	0.05%	56%	\$ 3,459,695,493.12	\$ 391,976,599	\$ 130,395,775,601.23	12.31x
27-Dec-19	7246.4	0.71%	53%	\$ 3,950,609,223.98	\$ 504,971,486	\$ 131,179,357,399.32	12.19x
28-Dec-19	7300.1	0.74%	53%	\$ 2,988,679,461.71	\$ 540,101,180	\$ 132,452,581,795.07	12.13x
29-Dec-19	7391	1.25%	51%	\$ 2,501,404,669.92	\$ 371,689,152	\$ 134,006,582,388.64	11.93x
30-Dec-19	7209.7	-2.45%	51%	\$ 4,162,469,831.89	\$ 449,190,783	\$ 131,081,294,265.51	11.94x
31-Dec-19	7168.3	-0.57%	51%	\$ 3,285,440,978.13	\$ 477,704,238	\$ 129,970,082,372.68	12.24x

Mean	\$ 7,247	-0.1%	53%	\$ 4,351,318,756	\$ 615,710,208	\$ 131,235,904,870	12.36x
Median	\$ 7,249	-0.4%	51%	\$ 3,804,614,180	\$ 593,392,910	\$ 131,122,071,900	12.39x

Total Volume \$ 130,539,562,673 \$ 18,471,306,225

How To Reach Us & Where To Trade

Feedback – We appreciate your attention. For comments, suggestions, or questions related to this report, [click here](https://forms.gle/vUZVP1UYc1SyTxr6A) (https://forms.gle/vUZVP1UYc1SyTxr6A) and let us know! Otherwise, please send us an e-mail at intel@kraken.com.

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