



A tough first half for markets has participants looking forward to the turn of the year; “halftime” could offer a new perspective on the same macro thematic

KEY TAKEAWAYS

- + A tough first half across the board as bitcoin and ether declined -59.6% and -72.6%, while the S&P 500 and the Nasdaq Composite fell -20.0% and -29.2%. Fixed income provided little protection to investors, with Barclays Agg down -10.3% while the dollar has remained a headwind, gaining 9.4% from the start of the year
- + We highlight six weekly commentaries that discuss our views on key thematic from the second quarter
- + We assess bitcoin’s improving fundamentals despite a rough start to the year, and discuss entity, miner, and exchange balances on page two

THE BIRD'S EYE VIEW

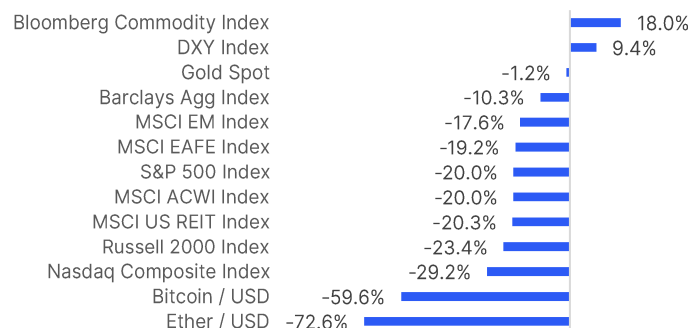
The first half of the 2022 year has officially come to an end, with both risk assets and fixed income down in an incredibly tough time for global markets. While the first quarter of the 2022 year wasn’t “all that bad” with bitcoin -1.2%, ether -10.5%, S&P 500 -5.0%, and Nasdaq Composite -9.1%, the second quarter was much different: bitcoin lost -59.1% and ether declined -69.4%, while the S&P 500 and the Nasdaq Composite lost -16.5% and -22.4% respectively.

It goes without saying that the market has had tough time navigating the Fed’s process of normalization. A series of mishaps have reduced confidence in the group of policymaker’s ability to curtail four-decade high price inflation, and markets have certainly acted with a “tantrum” type attitude for much of this year. Starting from “transitory” in 2021, the Federal Reserve quickly acted more aggressively than expected, raising 25bps in March and 50bp in May while taking the possibility of 75bps off the table. Then, just six weeks later, the Fed hiked 75 basis in the June meeting.

This set the stage for one of the worst first halves in quite some time: the S&P 500’s worst start since 1970, bitcoin and ether’s worst start since inception, and treasury bonds worst performance since 1788. A look at year-to-date total returns illustrates the global rout that’s occurred across markets:

1H TOTAL RETURNS

Source: Bloomberg, Eaglebrook Advisors. As of 6/30/2022.



As this macro volatility has resulted in higher correlations, bitcoin and ether have performed nearly lockstep with traditional equities. However, two specific events such as the collapse of Luna / UST in [early May](#) and the solvency concerns of lenders and hedge funds in [June](#), are key culprits for the significant digital asset underperformance versus expectations.

While global monetary policy and the potential for a soft or hard landing remains forefront of investor focus, several metrics that track inflation and inflation expectations have moved lower by the end of the quarter. These include some commodity futures (such as crude -13.4%, wheat -20.5%, copper -18.4% from June highs) and US breakevens (1yr -122bps, 2yr -112bps, 5yr -55bps, 10yr -44bps from June highs).

As a result, market participants have quickly priced in less financial tightening than originally feared. Traders now expect a peak policy rate of 3.3% in February of 2023, down from the 3.9% expected on June 14th, as well as two rate cuts in 2023 with an expected policy rate of 2.6% by the end of next year. As we wrote last [week](#), we believe lower inflation expectations are good for bitcoin and digital assets in this particular environment.

As investors must now determine whether “good news is good news, or good news is bad news” when it comes to Fed policymaking, the negative impact of their subjectivity this year continues to highlight the importance of bitcoin’s [objective monetary policy](#). We also point to our weekly titled “[questions](#)” where we answer many questions we’ve received from clients.

We note that the SEC has rejected GBTC’s spot ETF application for the same reasons spot ETFs have been denied for many years now: the lack of a surveillance-sharing agreements with a regulated market of significant size. The SEC’s response to GBTC is very similar to their response to VanEck back in November, which we analyzed [here](#). As a result, GBTC continues to trade at a near-record discount of 31%.

We discuss improving fundamentals despite price weakness and dissect changes in entity balances on page two.



Joseph Orsini, CFA
Vice President of Research

BITCOIN'S PERFORMANCE COMPARED

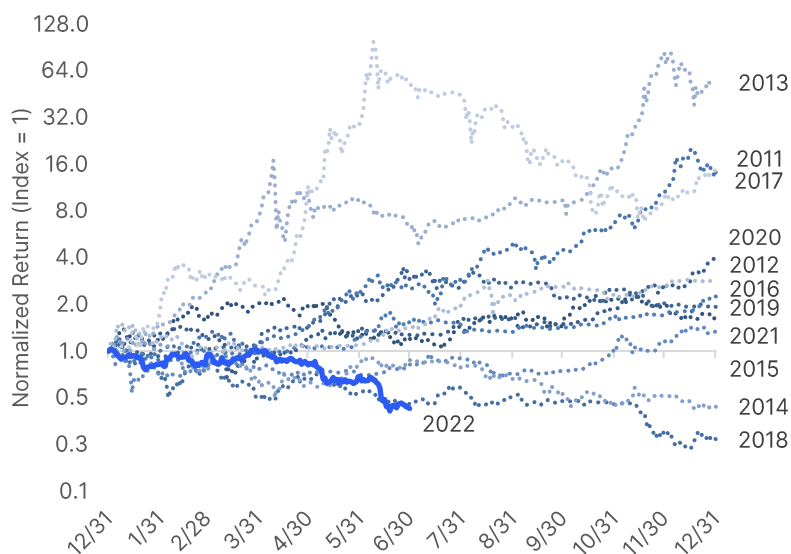
Bitcoin has experienced the worst start of the year in its history (full-year pricing data began 2011), with the asset down 59.6% year-to-date in the first six months.

While we continue to comment on the broader macro-specificity of this decline, it's ironic to us that in a year with strengthening fundamentals, performance is the worst it's ever been. Despite the tough macro picture, some positive developments that have occurred this year:

- + Improving regulatory structure with President Biden's Executive Order and a new foundational framework from the Lummis/Gillibrand bill
- + Continued financial integration with digital assets part of the conversation for long-term strategic asset allocations
- + Lightning network growth, with new highs in capacity and nodes and news of retail integration with major companies
- + Record highs in bitcoin's hash rate, or the computing power used to mine and secure bitcoin
- + Record highs in average transaction size (\$190k) and average daily transfer volume (\$48bn), with annual transfer volume on pace for \$17.9T (or 39% growth from 2021)
- + Record highs in holding trends, with 37.9% of bitcoin supply held longer than three years and 23.6% held longer than five years

BITCOIN SEASONALITY

Source: Glassnode, Eaglebrook Advisors



ON-CHAIN BUYER AND SELLER ACTIVITY

As we assess on-chain buyer and seller activity throughout the first half of 2022, we see that small entities have accumulated, while large entities have distributed, which is expected in a volatile macro period.

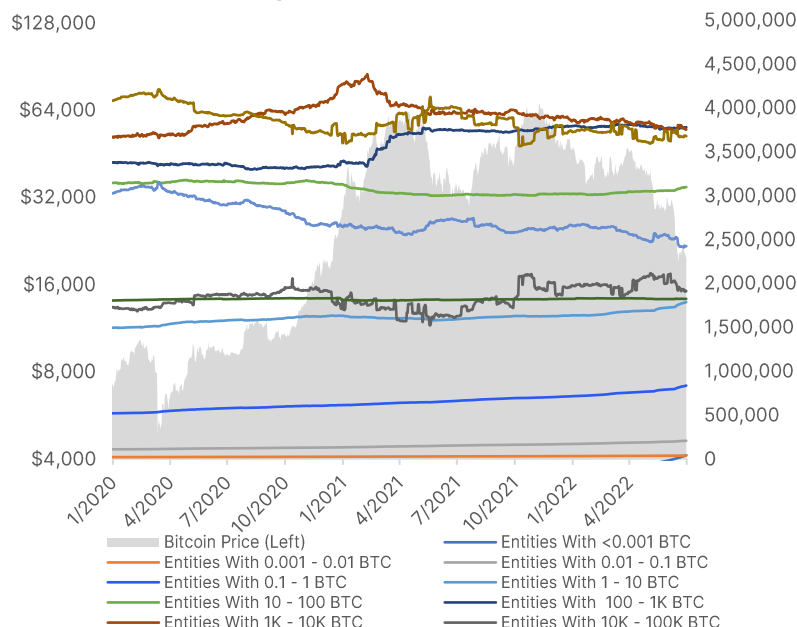
According to Glassnode data, those owning less than 10 bitcoin have increased their stack by 314,460 bitcoin this year, for a total of 2,886,816 by the end of Q2. This group experienced a record uptick in holdings for the month of June (+119,320), reflecting continued adoption of smaller investors across the world, particularly as prices moved lower. On the contrary, large investors with more than 1,000 bitcoin have sold a total of 217,094 bitcoin this year, likely reflecting changes in positioning amid concerns over the macro-environment. The group owns 9,332,731 total bitcoin.

Despite news headlines mentioning the sales of bitcoin by public miners such as Core Scientific (sold 7,200 bitcoin) and Bitfarms (sold 3,000 bitcoin), Glassnode's miner balance data shows outflows in May (~3,714 bitcoin) but inflows in June (+2,735 bitcoin). Miner balances have remained largely the same this year, up just 0.02% from six months ago.

With an increase in education around the importance of self-storage, June experienced record outflows from exchanges (124,651), decreasing available exchange supply to 2.42 million.

SUPPLY HELD BY SELECTED GROUPS

Source: Glassnode, Eaglebrook Advisors





Joseph Orsini, CFA
Vice President of Research

KEY MARKET DATA

As of the End of Q2, 6/30/2022

Market Capitalization	2018	2019	2020	2021	2022 YTD
Bitcoin Market Cap (mlns)	\$65,307	\$130,517	\$538,811	\$876,370	\$377,127
Ether Market Cap (mlns)	\$13,886	\$14,141	\$84,171	\$433,423	\$130,449
Total Crypto Market Cap (mlns)	\$122,177	\$186,105	\$766,003	\$2,250,184	\$846,200
Bitcoin Dominance %	53.5%	70.1%	70.3%	38.9%	44.6%
Ethereum Dominance %	11.4%	7.6%	11.0%	19.3%	15.4%

Source: Glassnode, TradingView, Eaglebrook Advisors

Bitcoin	2018	2019	2020	2021	2022 YTD
Supply (mlns)	17.5	18.1	18.6	18.9	19.1
Market Price	\$3,674	\$7,158	\$28,996	\$46,334	\$18,731
Realized Price	\$4,556	\$5,587	\$9,206	\$24,480	\$22,331
Realized Value (mlns)	\$79,524	\$101,309	\$171,112	\$463,063	\$426,125
Market Value / Realized Value	0.82	1.29	3.15	1.89	0.89
Hash Rate	40.5 EH/S	94.3 EH/S	153 EH/S	179.2 EH/S	252.1 EH/S
Transfer Volume (USD, mlns)	\$2,127,287	\$1,893,560	\$2,327,727	\$13,106,605	\$8,841,720
Avg Daily Transfer Volume (USD, mlns)	\$5,828	\$5,188	\$6,360	\$35,909	\$48,849
Avg Transaction Value (USD)	\$26,518	\$18,073	\$21,266	\$138,824	\$190,015

Source: Glassnode¹, Bloomberg, Eaglebrook Advisors

	Level	WTD%	MTD%	QTD%	YTD%	1 Year%	3 Year%	5 Year%	% off 52Wk High	90D Annualized Vol.
Bitcoin	\$18,731	-12.4%	-41.1%	-59.1%	-59.6%	-45.8%	64.4%	648.5%	-72.3%	68.4%
Ether	\$1,010	-19.0%	-48.2%	-69.4%	-72.6%	-54.8%	232.9%	258.2%	-78.9%	88.5%
S&P 500	3,785	-3.2%	-8.3%	-16.1%	-20.0%	-10.6%	35.2%	70.7%	-21.1%	27.6%
Nasdaq Composite	11,029	-5.0%	-8.7%	-22.3%	-29.2%	-23.4%	41.4%	88.5%	-31.3%	37.0%
Bloomberg Barclays Agg	2,111	0.7%	-1.6%	-4.7%	-10.3%	-10.3%	-2.8%	4.5%	-11.5%	8.0%
Gold Spot \$/Oz	\$1,807	-1.1%	-1.6%	-6.7%	-1.2%	2.1%	28.2%	45.6%	-11.9%	16.0%
DXI Index	\$105	0.5%	2.9%	6.5%	9.4%	13.3%	8.9%	9.5%	-0.8%	8.4%
WTI Crude	\$106	-3.4%	-7.8%	5.5%	37.4%	43.9%	80.9%	129.7%	-14.5%	60.0%

Source: Bloomberg, Eaglebrook Advisors

"Tantrum Table"

Asset	High Since 9/30/21	Max Drawdown	Low Close Date	Rally From Low	YTD Price % Change
ARK Innovation	11/1/2021	-70.8%	6/13/2022	9.0%	-57.8%
Ishares MSCI USA Momentum	11/3/2021	-32.8%	6/17/2022	4.7%	-25.0%
Invesco S&P 500 High Beta	11/8/2021	-30.9%	6/16/2022	2.6%	-25.8%
Ishares Russell 2000 Value	11/8/2021	-24.0%	6/16/2022	1.2%	-18.0%
Ishares Russell 2000 Growth	11/8/2021	-40.7%	6/16/2022	6.2%	-29.6%
Barclays US Aggregate Index	11/9/2021	-13.3%	6/14/2022	2.6%	-10.3%
Bitcoin	11/9/2021	-73.7%	6/18/2022	5.3%	-59.6%
Ether	11/9/2021	-81.2%	6/18/2022	11.9%	-72.6%
Us Breakeven 30 Year	4/21/2022	-0.47	6/30/2022	0.00	-0.17
Us Breakeven 10 Year	4/21/2022	-0.69	6/30/2022	0.00	-0.25
Us Breakeven 5 Year	3/25/2022	-1.11	6/30/2022	0.00	-0.29
Us Breakeven 2 Year	3/25/2022	-1.65	6/30/2022	0.00	0.07
Gold Spot \$/Oz	3/8/2022	-11.9%	6/30/2022	0.0%	-1.2%
Nasdaq Composite Index	11/19/2021	-33.7%	6/16/2022	3.6%	-29.5%
S&P 500 Info Tech Index	12/27/2021	-30.7%	6/16/2022	3.2%	-27.2%
S&P 500 Index	1/3/2022	-23.6%	6/16/2022	3.2%	-20.6%

Source: Bloomberg, Eaglebrook Advisors



Joseph Orsini, CFA
Vice President of Research

DISCLOSURES

Realized Price, Source: Glassnode. Realized Price is the Realized Cap divided by the current supply. Realized Capitalization, Source: Glassnode. Realized Cap values different part of the supplies at different prices (instead of using the current daily close). Specifically, it is computed by valuing each UTxO by the price when it was last moved. Market Cap / Realized Cap, Source: Glassnode. Market Value to Realized Value (MVRV) is the ratio between market cap and realized cap. It gives an indication of when the traded price is below a "fair value". Hash Rate, Source: Glassnode: The average estimated number of hashes per second produced by the miners in the network. Total Transfer Volume, Source: Glassnode. Data is change-adjusted, annual sum: The total amount of coins transferred on-chain, adjusted by change volume. Only successful transfers are counted. Avg Daily Transfer Volume, Source: Glassnode. Data is change-adjusted, daily average: The total amount of coins transferred on-chain, adjusted by change volume. Only successful transfers are counted. Avg Transaction Value, Source: Glassnode. The mean value of a transfer, adjusted by change volume. Only successful transfers are counted.

Investment advisory and management services are provided by Eaglebrook Advisors, Inc., a registered investment advisor. Information presented is for educational purposes only and should not be construed as providing investment advice. Past performance is no indication of future results. Investing in digital currency comes with significant risk of loss that a client should be prepared to bear, including, but not limited to, volatile market price swings or flash crashes, market manipulation, economic, regulatory, technical, and cybersecurity risks. In addition, digital currency markets and exchanges are not regulated with the same controls or customer protections available in equity, option, futures, or foreign exchange investing. Eaglebrook does not offer tax advice. Neither consultations nor information published by Eaglebrook should be construed as offering or providing tax advice.

Volatility Risk: Digital currency is a speculative and volatile investment asset. Investors should be prepared for volatile market swings and prolonged bear markets. Digital currency can have higher volatility than other traditional investments such as stocks and bonds and market movements can be difficult to predict.

Economic Risk: The economic risk associated with digital currency is in the lack of widespread or continuing digital currency adoption. The market and investors could decide that digital currency should not be valued at the current market capitalization due to a variety of factors.
Regulatory Risk: Digital currency could be banned or highly regulated by governments that would deter investors from buying or holding digital currency.

Technical Risk: Digital currency is a dynamic network with a codebase that is updated to add new security and functionality features. The updated code that is merged by the core developers could potentially have an error that threatens the security or functionality of the digital currency network.

Cybersecurity Risk: Digital currency exchanges and wallets have been hacked and digital currency has been stolen in the past. This is a potential risk that clients must be comfortable with when investing and holding digital currency. Theft is less likely when holding digital currency at a qualified custodian in offline systems (cold storage) with institutional security and controls.

The indexes presented are unmanaged portfolios of specified securities and the performance shown is gross of fees which do not reflect any initial or ongoing expenses. Indexes cannot be invested in directly. Returns for digital assets may differ significantly from the returns of indexes which hold securities. Returns are for the time periods shown.

BGN, Bloomberg Generic Price: A real-time composite based on quotes from multiple contributors that provides a market indication of where assets are priced. BGN uses both executable and indicative pricing, depending on the type of quotes available in the marketplace at the time of pricing. This methodology is used for bitcoin and ether.

The S&P 500 Index is an unmanaged value-weighted index of 500 common stocks that is generally considered representative of the U.S. stock market.

The NASDAQ Composite Index is a broad-based capitalization-weighted index of stocks in all three NASDAQ tiers: Global Select, Global Market and Capital Market.

The Bloomberg US Aggregate Bond Index is a broad-based flagship benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, MBS (agency fixed-rate pass-throughs), ABS and CMBS (agency and non-agency).

The ICE U.S. Dollar Index is a geometrically-averaged calculation of six currencies weighted against the U.S. dollar.

The Gold Spot price is quoted as US Dollars per Troy Ounce.

Bloomberg's spot crude oil price indications use benchmark WTI crude at Cushing, OK ; and other U.S. crude oil grades trade on a price spread differential to WTI, Cushing.

The Volatility Index (VIX) shows the market's expectations of 30-day volatility. It is constructed using the implied volatilities of a wide range of S&P 500 index options. The VIX is a widely used measure of market risk.

ARK Innovation ETF is an actively managed exchange-traded fund incorporated in the USA. The Fund will invest in equity securities of companies relevant to the theme of disruptive innovation. Relevant themes are those that rely on or benefit from the development of new products or services in scientific research relating to Genomics Revolution, Web x.0, and Industrial Innovation.

iShares MSCI USA Momentum Factor ETF is an exchange traded fund incorporated in the USA. The Fund seeks to track the performance of an index that measures the performance of U.S. large and mid capitalization stocks exhibiting relatively higher momentum characteristics, before fees and expenses.

Invesco S&P 500 High Beta ETF is an exchange-traded fund incorporated in the USA. The Fund tracks the performance of the Russell 2000 Value Index which consists of the 100 stocks from the S&P500 with the highest sensitivity to market movements, or beta, over the past year. The index is designed for investors initiating a bullish strategy or making a directional bet. The Fund is rebalanced quarterly.

iShares Russell 2000 Value ETF is an exchange-traded fund incorporated in the USA. The ETF tracks the performance of the Russell 2000 Value Index and holds small cap US equities focused on low price to book ratios and lower forecasted growth. Its investments are primarily focused in the consumer discretionary, financial and industrial sectors. The ETF uses a representative sampling approach.

iShares Russell 2000 Growth ETF is an exchange-traded fund incorporated in the USA. The ETF tracks the performance of the Russell 2000 Growth Index and invests in over 1000 small cap US equities across all sectors. The ETF weights its holdings using a representative sampling indexing strategy, generally investing at least 90% of its assets in the underlying index.

US Breakeven Rates: The rates are United States breakeven inflation rates. They are calculated by subtracting the real yield of the inflation linked maturity curve from the yield of the closest nominal Treasury maturity. The result is the implied inflation rate for the term of the stated maturity.

The MSCI Em (Emerging Markets) Index is a free-float weighted equity index that captures large and mid cap representation across Emerging Markets (EM) countries. The index covers approximately 85% of the free float-adjusted market capitalization in each country.

The MSCI EAFE Index is a free-float weighted equity index. The index was developed with a base value of 100 as of December 31, 1969. The MSCI EAFE region covers DM countries in Europe, Australasia, Israel, and the Far East

The MSCI US REIT Index is a price-only index, which MSCI began calculating on June 20, 2005. Previously, this index (then known as the Morgan Stanley REIT Index) was calculated and maintained by the AMEX. The AMEX began calculating the index with a base level of 200, as of December 30, 1994.

Bloomberg Commodity Index (BCOM) is calculated on an excess return basis and reflects commodity futures price movements. The index rebalances annually weighted 2/3 by trading volume and 1/3 by world production and weight-caps are applied at the commodity, sector and group level for diversification. Roll period typically occurs from 6th-10th business day based on the roll schedule.

Standard and Poor's 500 Information Technology Index is a capitalization-weighted index. The index was developed with a base level of 10 for the 1941-43 base period.

For more information, please see our Form ADV Disclosures and Privacy Policy on our website.

Questions? Get in Touch:

Joe Orsini, CFA
Vice President of Research
jorsini@eaglebrookadvisors.com