



## Supply Shocks – April 5<sup>th</sup>, 2022

*Bitcoin outperformed equities and fixed income through a tumultuous first quarter; while underperforming commodities, the price impact of “supply shocks” are now apparent*

### KEY TAKEAWAYS

- + With the first quarter of '22 in the rear-view mirror, we compare returns (BTC -1.2%, ETH -10.5%) to major assets
- + Commodities have broadly outperformed year-to-date, many of which experienced a “supply shock” – a great illustration of what can occur with bitcoin’s perfectly inelastic supply and increasing scarcity
- + We roundup the top public holders of bitcoin – an example of increasingly “strong hands” and further “illiquid supply” held as long-term investments

### THE BIRD'S EYE VIEW

The first quarter of 2022 comes to an end with bitcoin remaining relatively unscathed through broader equity, fixed income, commodity, and currency volatility.

The same themes we’ve written about at length - such as the process of the Fed’s normalization, the overhangs of market uncertainties, and the maturation of bitcoin and digital assets as long-term investments in traditional portfolios - are likely to remain key themes in the second quarter and beyond.

Bitcoin has remained resilient through macro uncertainty: while participants have found many reasons to be bearish for months now, bitcoin’s ability to bounce off the lows is certainly a signal that the asset is maturing quite rapidly. Bitcoin spends [less time](#) in deep drawdowns, and realized volatility has declined from peaks of ~80% in prior pullbacks to just ~55% ann. (just 1.9x more volatile than the Nasdaq).

As we wrote last week, bitcoin is no stranger to the “wall of worry” - a characteristic that should bode well through the remainder of 2022.

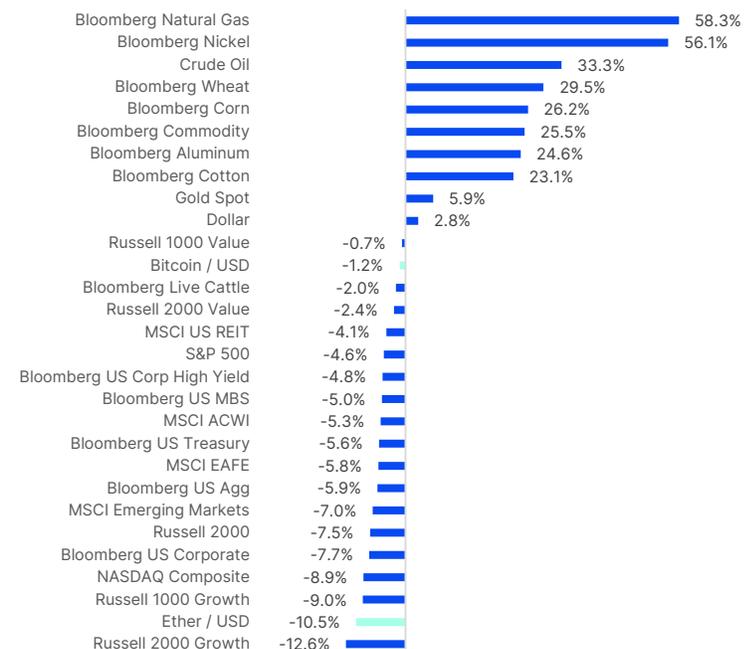
In Q1, bitcoin declined just 1.2% versus S&P 500 (-4.6%), the Nasdaq Composite (-8.9%), and Barclay’s Agg (-5.9%). Bitcoin underperformed gold through macro uncertainty (gold spot +5.9%) but has held up better than both US equities and bonds through a tumultuous first quarter, which is no small feat for an emerging asset that is just 13 years old.

While the Ethereum merge in late Q2 or early Q3 serves as an upcoming catalyst (which we will begin to discuss more frequently), the asset underperformed bitcoin in the down quarter. The more levered play to technology and growth declined 10.5%, performing more in-line with the Nasdaq Composite (-8.9%) and the Russell 2000 growth (-12.6%).

A comparison of Q1 2022 returns:

### Q1 2022 RETURNS

Source: Bloomberg, Eaglebrook Advisors



Most interestingly, this quarter illustrates what can occur when commodities experience a “supply shock,” or a structural (and often unexpected) reduction in output. War in Ukraine has led to the supply of natural gas, nickel, crude oil, corn, wheat, and aluminum being reduced significantly, which has driven prices higher at a rapid pace.

For bitcoin, its perfectly inelastic supply has set the stage for a similar “supply shock” as seen recently in commodities. While bitcoin’s demand is growing, its supply is structurally reduced every four years. As more bitcoins are held by those with little or no tendency to sell, we can expect a similar “shock” to occur, which we discuss on page two.



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### BITCOIN'S SUPPLY SHOCK

Bitcoin's known, fixed, and immutable supply structure is a unique characteristic in which supply cannot increase upon growing demand – the asset is “perfectly inelastic.” While 19 million bitcoins have now been mined, one million more will be made available by April '26, with the final to be mined in ~2140.

As we know, bitcoin's scarcity is driven by both “halvings” (or the 50% reduction in miner rewards ever four years) as well as the existing supply that is held but unlikely to be sold.

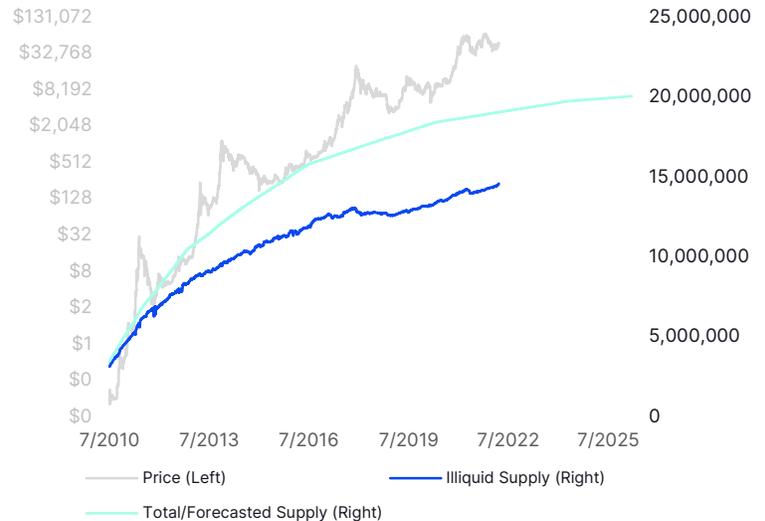
Currently, “illiquid” entities, or those with little tendency to sell, hold 14,532,663 of the 19,001,921 circulating supply (76.5%). Illiquid supply is currently 3.3x larger than liquid and highly liquid supply combined.

As we've seen in commodity markets as of recent: a sharp reduction in supply can significantly impact prices to the upside.

As more entities that are unlikely to sell accumulate bitcoin, a similar “supply shock” is likely to occur - it's only a matter of time.

### ILLIQUID SUPPLY

Source: Glassnode, Eaglebrook Advisors



### ROUNDING UP THE LARGEST PUBLIC BTC HOLDERS

Part of the rise in bitcoin's “illiquid supply” is due its growing institutional holder base. As the asset becomes more mainstream and accepted, companies, governments, and investment vehicles are beginning to gobble up existing supply.

While previously a retail driven market, this institutionalization brings bitcoin into “strong hands,” or those with long-term investment horizons and the ability or mandate to hold through periods of volatility.

By of the end of the first quarter, these entities held over 1.5 million bitcoin, or nearly \$70bn in USD value. This is over 7% of fully diluted (21mln) supply.

As time progresses, we expect these existing holders, along with new corporate, government, and institutional entrants, to own larger allocations of bitcoin's total supply.

This will drive further scarcity and again, the eventual “supply shock.”

Category	# of BTC	Value Today	% of 21m
ETFs	813,906	\$37,263,482,117	3.9%
Countries	271,417	\$12,426,425,811	1.3%
Public Companies	256,337	\$11,736,019,477	1.2%
Private Companies	174,068	\$7,969,445,864	0.8%
<b>Totals:</b>	<b>1,525,830</b>	<b>\$69,857,878,394</b>	<b>7.3%</b>

Public Holders, Ranked	# of BTC	Value Today	% of 21m
Grayscale Bitcoin Trust	643,572	\$29,469,229,970	3.1%
Bulgaria (govt)	213,519	\$9,777,057,600	1.0%
Block.one	140,000	\$6,410,614,812	0.7%
MicroStrategy	125,051	\$5,726,098,520	0.6%
CoinShares / XBT Provider	48,466	\$2,219,263,268	0.2%
Ukraine (govt)	46,351	\$2,122,417,194	0.2%
Tesla, Inc	42,902	\$1,964,487,119	0.2%
Purpose Bitcoin ETF	30,966	\$1,417,936,416	0.1%
3iQ CoinShares Bitcoin ETF	21,237	\$972,444,477	0.1%
ETC Group Bitcoin ETP	17,976	\$823,122,942	0.1%
<b>Top 10 Public Totals:</b>	<b>1,330,040</b>	<b>\$60,902,672,318</b>	<b>6.3%</b>

Source: buybitcoinworldwide.com, Eaglebrook Advisors. Accessed 4/4/22.



## KEY MARKET DATA

As of Q1, 3/31/2022

Market Capitalization	2018	2019	2020	2021	2022 YTD
<b>Bitcoin Market Cap</b> (mlns)	\$65,307	\$130,517	\$538,811	\$876,370	\$865,578
<b>Ether Market Cap</b> (mlns)	\$13,886	\$14,141	\$84,171	\$433,423	\$387,949
<b>Total Crypto Market Cap</b> (mlns)	\$122,177	\$186,105	\$766,003	\$2,250,184	\$2,102,679
<b>Bitcoin Dominance %</b>	53.5%	70.1%	70.3%	38.9%	41.2%
<b>Ethereum Dominance %</b>	11.4%	7.6%	11.0%	19.3%	18.5%

Source: Glassnode, TradingView, Eaglebrook Advisors

Bitcoin	2018	2019	2020	2021	2022 YTD
<b>Supply</b> (mlns)	17.5	18.1	18.6	18.9	19.0
<b>Market Price</b>	\$3,674	\$7,158	\$28,996	\$46,334	\$45,768
<b>Realized Price</b>	\$4,556	\$5,587	\$9,206	\$24,480	\$24,545
<b>Realized Value</b> (mlns)	\$79,524	\$101,309	\$171,112	\$463,063	\$466,339
<b>Market Value / Realized Value</b>	0.82	1.29	3.15	1.89	1.86
<b>Hash Rate</b>	40.5 EH/S	94.3 EH/S	153 EH/S	179.2 EH/S	193.8 EH/S
<b>Transfer Volume</b> (USD, mlns)	\$2,127,287	\$1,893,560	\$2,327,727	\$13,106,605	\$2,785,535
<b>Avg Daily Transfer Volume</b> (USD, mlns)	\$5,828	\$5,188	\$6,360	\$35,909	\$31,298
<b>Avg Transaction Value</b> (USD)	\$26,518	\$18,073	\$21,266	\$138,824	\$125,187

 Source: Glassnode<sup>1</sup>, Bloomberg, Eaglebrook Advisors

	Level	WTD%	MTD%	QTD%	YTD%	1 Year%	3 Year%	5 Year%	% off 52Wk High	90D Annualized Vol.
<b>Bitcoin</b>	\$45,768	4.3%	9.9%	-1.2%	-1.2%	-22.4%	1018.2%	4158.7%	-32.4%	55.6%
<b>Ether</b>	\$3,301	6.3%	17.0%	-10.5%	-10.5%	70.2%	2242.0%	6626.1%	-31.2%	68.8%
<b>S&amp;P 500</b>	4,530	0.2%	3.7%	-4.6%	-4.6%	15.6%	68.1%	109.8%	-5.5%	20.9%
<b>Nasdaq Composite</b>	14,221	0.2%	3.5%	-8.9%	-8.9%	8.1%	89.0%	152.7%	-11.4%	29.6%
<b>Bloomberg Barclay's Agg</b>	2,215	0.3%	-2.8%	-5.9%	-5.9%	-4.2%	5.2%	11.2%	-7.1%	6.1%
<b>Gold</b>	\$1,937	-1.0%	1.5%	5.9%	5.9%	13.5%	49.9%	55.1%	-5.5%	14.5%
<b>DXY Index</b>	98.31	-0.5%	1.7%	2.8%	2.8%	5.4%	1.1%	-2.0%	-1.0%	6.6%
<b>WTI Crude</b>	\$100	-12.3%	4.8%	30.3%	30.3%	69.5%	66.7%	98.2%	-18.9%	58.0%

Source: Bloomberg, Eaglebrook Advisors

### "Tantrum Table"

Asset	High Since 9/30/21	Max Drawdown	Low Date	Rally from Low	YTD % Change
ARK Innovation	11/1/2021	-58.2%	3/14/2022	26.8%	-29.9%
Ishares MSCI USA Momentum	11/3/2021	-22.5%	3/8/2022	12.1%	-7.5%
Invesco S&P 500 High Beta	11/8/2021	-17.6%	3/14/2022	11.5%	-3.9%
Ishares Russell 2000 Value	11/8/2021	-14.5%	1/27/2022	6.7%	-2.8%
Ishares Russell 2000 Growth	11/8/2021	-28.5%	3/14/2022	9.2%	-12.7%
Ishares Core U.S. Aggregate	11/9/2021	-8.0%	3/25/2022	0.9%	-6.1%
Ether	11/9/2021	-50.8%	1/27/2022	39.8%	-10.5%
Bitcoin	11/9/2021	-47.8%	1/23/2022	29.4%	-1.2%
Us Breakeven 30 Year	3/14/2022	-0.48	2/18/2022	0.32	0.06
Us Breakeven 10 Year	3/25/2022	-0.61	1/21/2022	0.46	0.23
Us Breakeven 5 Year	3/25/2022	-1.04	12/20/2021	0.74	0.52
Gold Spot \$/Oz	3/8/2022	-6.5%	3/15/2022	1.0%	5.9%
Invesco Nasdaq 100	11/19/2021	-21.2%	3/14/2022	13.9%	-8.9%
S&P 500 Info Tech Index	12/27/2021	-20.3%	3/14/2022	12.8%	-8.6%
S&P 500 Index	1/3/2022	-13.0%	3/8/2022	8.6%	-4.9%

Source: Bloomberg, Eaglebrook Advisors



## 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.

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**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.

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## Questions? Get in Touch:

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