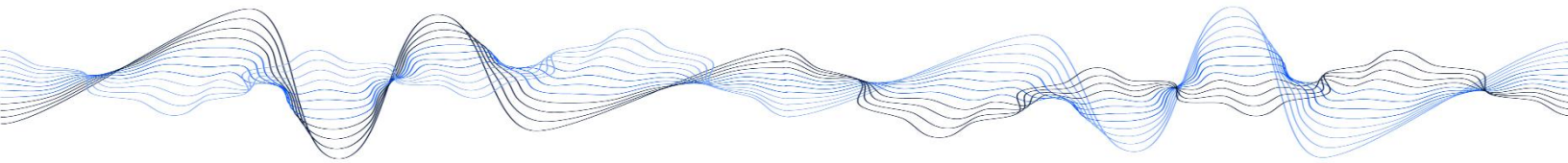




Digital Pulse Report: A Vibrant Symphony.



15 June 2023

Marcel Kasumovich
Deputy CIO
Coinbase Asset Management



Vibrant Symphony: In the orchestra of digital asset markets, Bitcoin has long been the concertmaster. Its price action dictates the pace and rhythm of others. But as we've learned from past cycles, speculative price action can distract us from deeper, more meaningful measures of an asset's health – market vibrancy, network adoption, technological progress, and holder conviction. Typically, all digital assets suffer when markets play out of tune, slowing innovation and lowering the conviction of users. The current situation contradicts this norm. Bitcoin markets are stabilizing, as evidenced by lower leverage and reduced volatility. Our Digital Pulse not only shows signs of life but healthy ones. Key indicators like transfer activity, network supply distribution, and user activity are robust at either neutral or high levels. Mining activity holds its tempo steady while the hashrate rises, executing a crescendo of network security. Trustless coordination between users and miners maintains harmony in the Bitcoin ecosystem. This is a feature recognized in the conviction of Bitcoin holders of more than a year, which account for a record 68% of the total supply, despite broad-based regulatory pressure. They are committed to their role in the orchestra until the final curtain, an undeterred group having fun as they play. That's what makes great music.

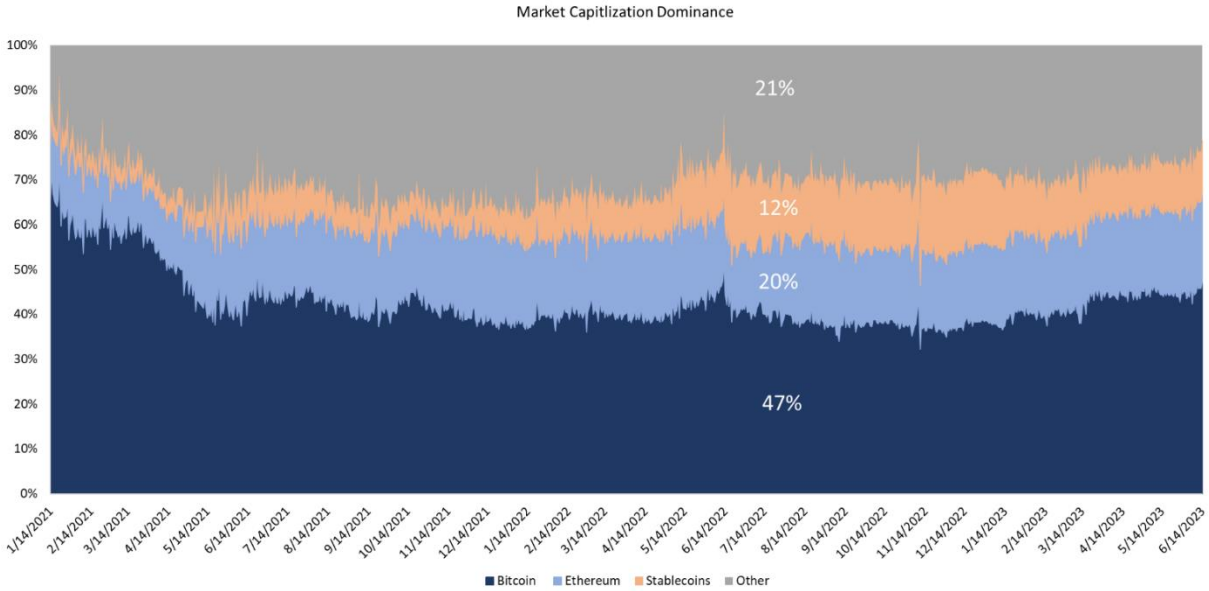
WEEKLY BEATS

1. Chart of the Week – Bitcoin Dominance at One-Year Highs
2. Fundamental Pulse – Neutral
3. Bitcoin's Network Pulse
4. A Fair Value
5. Long-Term Holder Resiliency

One River Digital Asset Management has been acquired by Coinbase and is now Coinbase Asset Management. Additional details on the transaction may be found on the Coinbase blog. References to One River Asset Management and One River Digital Asset Management may be contained herein during the transition period but are subject to change.

1. BITCOIN DOMINANCE AT ONE-YEAR HIGHS

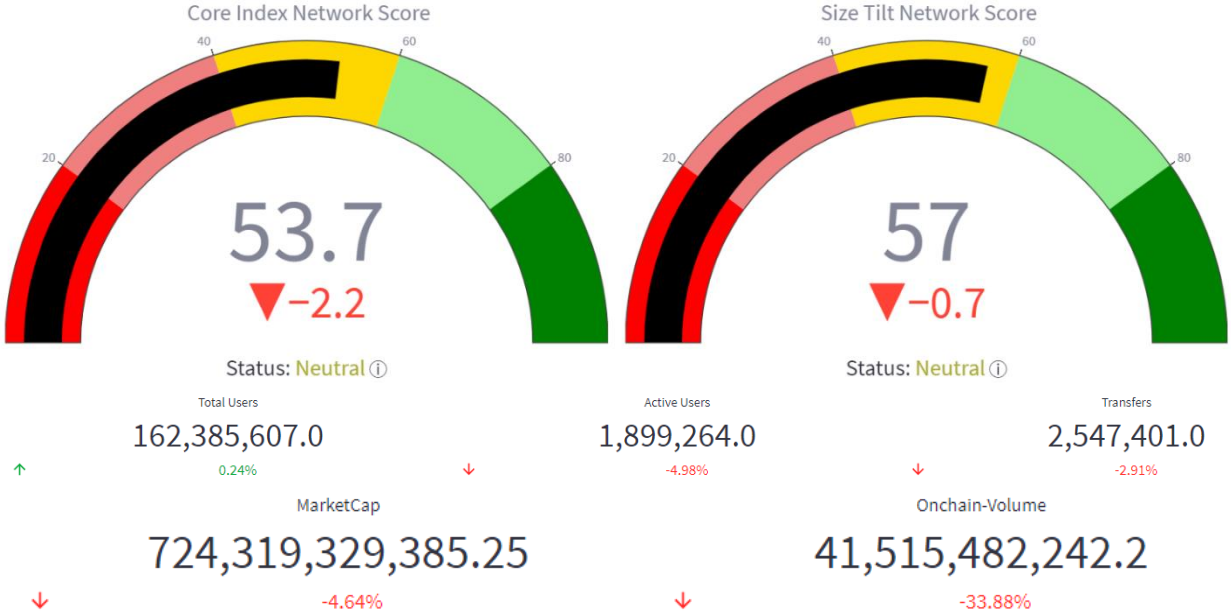
The role of Bitcoin as the digital ecosystem’s safe haven has been increasingly prevalent in recent months. Bitcoin market capitalization dominance has increased to 47% from 40% since the start of the year. Even amidst regulatory scrutiny, its market capitalization dominance reached new highs for this cycle. Ethereum and stablecoins follow, but they’re lagging behind Bitcoin’s leading position.



Source: The Block. Coingecko.

One River Digital Asset Management has been acquired by Coinbase and is now Coinbase Asset Management. Additional details on the transaction may be found on the Coinbase blog. References to One River Asset Management and One River Digital Asset Management may be contained herein during the transition period but are subject to change.

2. FUNDAMENTAL PULSE – NETWORK PERFORMANCE



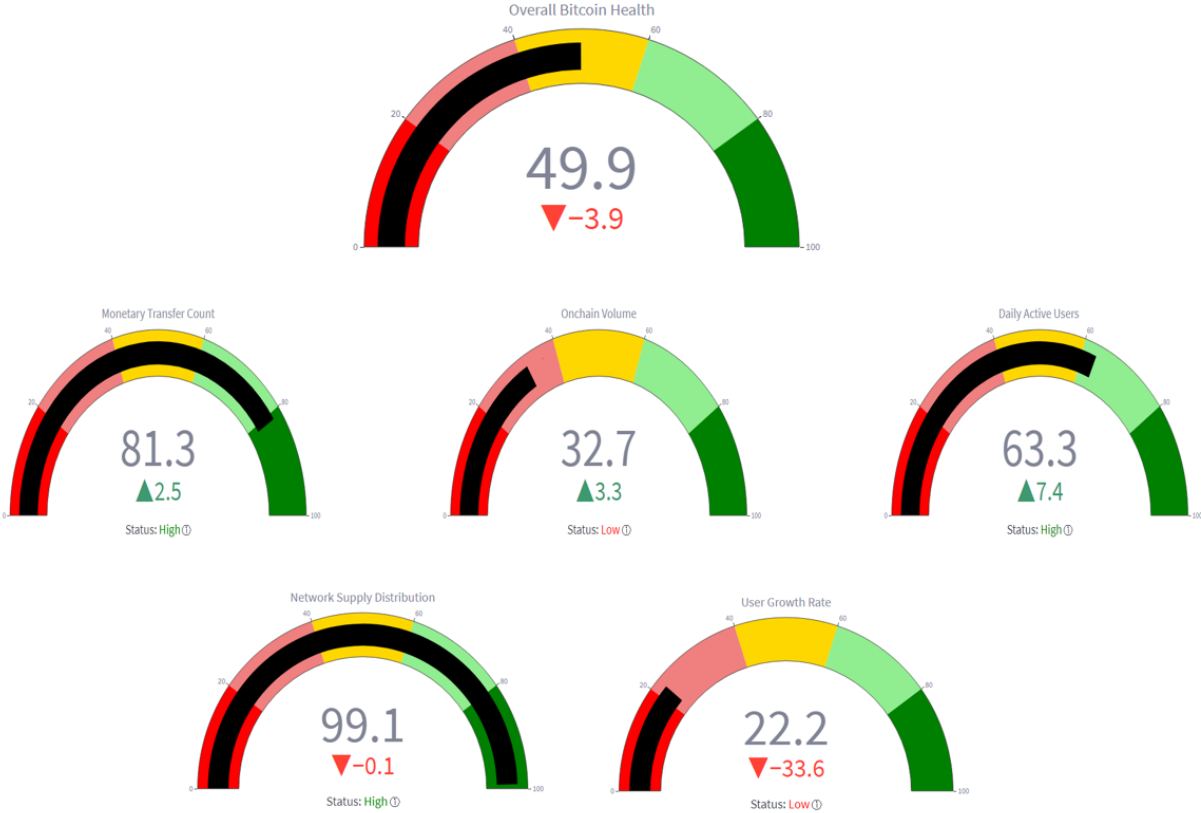
The Pulse of Polygon is an outlier in the past week, rising 21 points to 63. It demonstrates the importance of qualitative assessment of quantitative measures. The Pulse aims to measure fundamental activity. However, in brief spurts, that activity can be driven by bearish patterns. Our judgment is that the surge in the Pulse reflects selling pressure rather than fundamental growth.

Assets	Asset Score	7d Change	30d Change	Volume	Transfers	Active Users	User Growth	Valuation	Velocity	Network Distribution
Coinbase Core	54	-2	2	39	70	67	35	46	31	88
Coinbase Size Tilt	57	-1	4	47	68	67	40	54	38	85
Bitcoin	51	-3	2	33	81	63	22	39	12	99
Ethereum	62	0	1	47	46	77	63	57	72	62
Polygon	63	21	32	81	56	59	22	78	33	88
Litecoin	66	-4	-5	48	90	86	53	69	42	80
Cardano	73	-2	16	95	62	44	62	92	60	92

*Snapshot from the One River Digital Pulse on 6/14/2023. Seven-day change in the Core and Size-Tilt Index Scores.
Notes: Status- High > 60, Neutral 40 to 60, Low < 40. A score of 54.5 means the Index value is better than 54.5% of its values in the past 365 days. Due to incomplete data coverage, index scores exclude Solana. Asset Scores are unique and sensitive to changes in a particular asset. Readers should not compare Asset Scores across assets. See MVIS for more information on the [Coinbase Core Index](#) and [Coinbase Size Tilt Index](#).

One River Digital Asset Management has been acquired by Coinbase and is now Coinbase Asset Management. Additional details on the transaction may be found on the Coinbase blog. References to One River Asset Management and One River Digital Asset Management may be contained herein during the transition period but are subject to change.

3. BITCOIN NETWORK PULSE



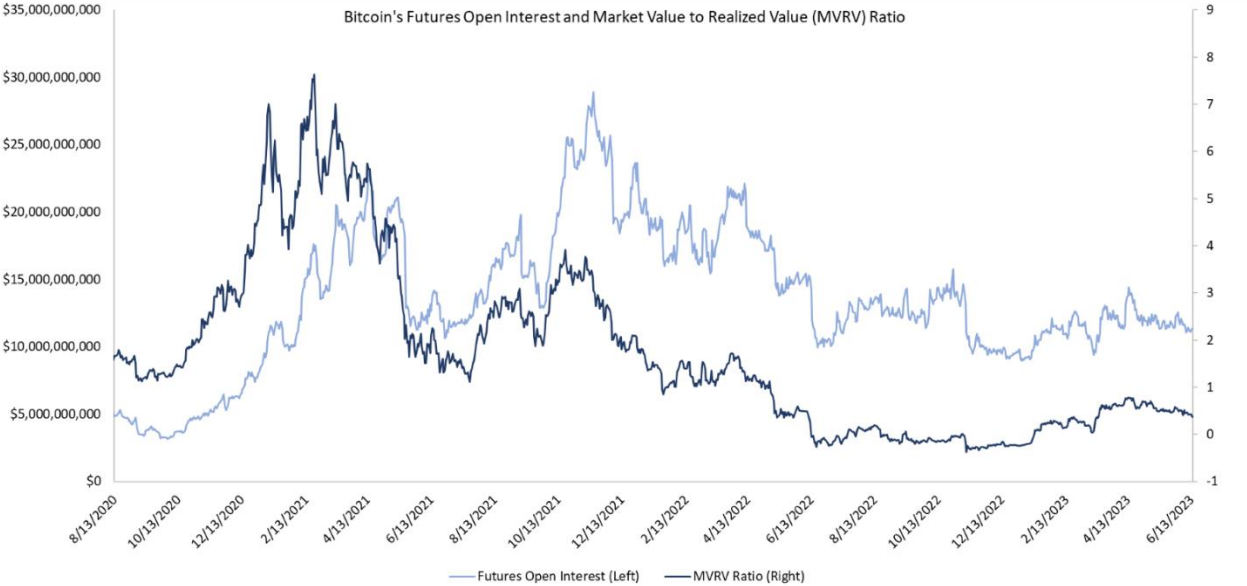
The Bitcoin network displays stability and growth in transfer and user activity. Additionally, the greater supply distribution among smaller holders highlights decentralization. Nonetheless, mainstream adoption faces challenges due to the slow user growth rate.

Source: Coinbase Asset Management Pulse.

One River Digital Asset Management has been acquired by Coinbase and is now Coinbase Asset Management. Additional details on the transaction may be found on the Coinbase blog. References to One River Asset Management and One River Digital Asset Management may be contained herein during the transition period but are subject to change.

3. A FAIR VALUE

The current market cycle has been marked by a purge of the excess leverage, as indicated by the collapse in futures’ open interest. Various network indicators also suggest a fair value for Bitcoin’s price. Among these indicators is the **MVRV Ratio**, which compares the market value to realized value. As demonstrated below, Bitcoin’s price is currently very close to its average cost basis.

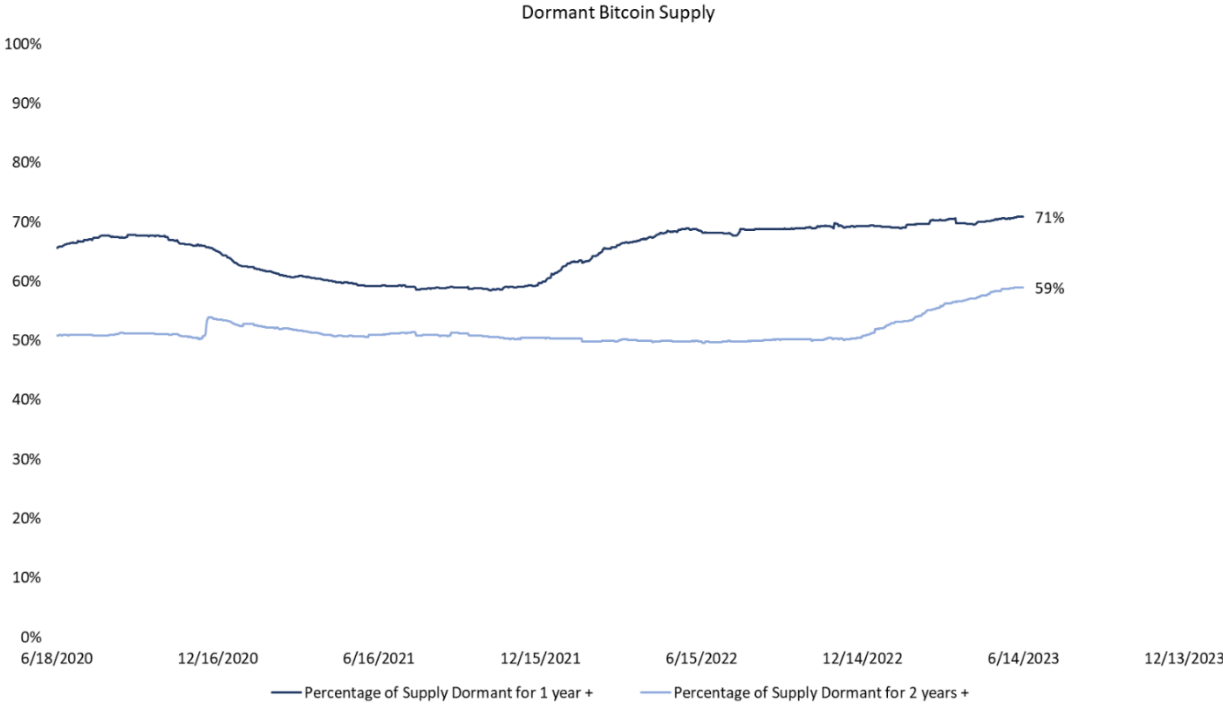


Source: CoinMetrics.

One River Digital Asset Management has been acquired by Coinbase and is now Coinbase Asset Management. Additional details on the transaction may be found on the Coinbase blog. References to One River Asset Management and One River Digital Asset Management may be contained herein during the transition period but are subject to change.

4. LONG TERM HOLDERS' RESILIENCY

Tourists in asset market are transient while long-term holders provide stability. The recent regulatory pressure did not significantly influence the transaction volume from long-term holders to [exchanges](#). Their commitment endures, solidifying Bitcoin's financial foundation.



Source: Coin Metrics. Data displayed from 6/18/2020 to 12/13/2023.

Metric Definitions

1. Volume – The aggregated value of native units transferred between addresses on-chain.

2. Transfer Count – The sum count of transfers between addresses. It becomes more valuable when used in conjunction with Volume.

2.1 Low Transfer Count & High Volume: High volume but transferred by a few addresses.

2.2 High Transfer Count & Lower Volume - Indicates higher retail activity or exchanges amongst small accounts.

2.3 Lower Transfer Count & Lower Volume: Indicates slower network usage and low network demand.

2.4 High Transfer Count & Higher Volume- indicates high network usage. A persistent trend is substantial.

3. Active Users: Number of addresses active in the network as recipients or originators of ledger change. This includes value transfers, signing blocks, and other forms of ledger change activity.

3.1 High Value: High network usage and high demand.

3.2 Low Value: Low network usage and low demand.

4. User Growth Rate: The rate at which new addresses with non-zero balances are added to the network.

4.1 High Value: Indicates users being added to the network at an increasing rate.

4.2 Low Value: Indicates users being added to the network at a slower pace.

5. Valuation: This metric compares the on-chain volume to the realized capitalization representing the value of the network. Realized capitalization is a revised form of market capitalization that accounts for the value of the coin at the time the coin was last spent. A lower volume compared to the high value of the network indicates the network could be overvalued and vice versa.

5.1 High Value: Indicates the network is closer to its real value based on the on-chain volume.

5.2 Low Value: Indicates the network is very close to being overvalued considering the activity on the network.

5.3 Medium value: Asset is reasonably valued—sustainable demand for transactions.

6. Velocity –This indicator shows the turnover of coins in the network as measured by on-chain volume divided by active supply. The primary use of this metric in this instance is to help assess an asset's market-relevant supply.

6.1 High Value: There is greater circulation of coins in the network and use for payments.

6.2 Lower Value: There is lower circulation of coins in the network and use for payments.

7. Network distribution – The metric used, the SER ratio, compares the smallest accounts (sum held by accounts with a balance less than 0.00001% of the supply) against the richest accounts (sum held by the top 1% addresses).

7.1 High value: Signifies high distribution of supply and higher decentralization.

7.2 Low value: Low supply distribution and heavy concentration amongst a few wallets.

Disclaimer

One River Digital Asset Management has been acquired by Coinbase and is now Coinbase Asset Management. Additional details on the transaction may be found on the [Coinbase blog](#). References to One River Asset Management and One River Digital Asset Management may be contained herein during the transition period but are subject to change.

This communication, including any attachments, is intended only for the use of the addressee and may contain information that is confidential or otherwise protected from disclosure. Any unauthorized use, distribution, modification, forwarding, copying or disclosure is strictly prohibited. If you have received this communication in error, please delete this message, including any attachments, and notify the sender immediately. The information and any disclosures provided herein do not constitute a solicitation or offer to purchase any security or other financial product or investment and is not intended as investment, tax, or legal advice. Unless otherwise noted, all information is estimated, unaudited and may be subject to revision without notice. Past results are not indicative of future results.

This communication may contain statements of opinion, including but not limited to, the author's analysis and views with respect to: digital assets, projected inflation, macroeconomic policy, and the market in general. Statements of opinion herein have been formulated using the author's experience, research, and/or analysis, however, such statements also contain elements of subjectivity and are often subjective in nature. In addition, when conducting the analyses on which it bases statements of opinion, the author(s) will incorporate assumptions, which in some cases may be shown to be inaccurate in the future, including in certain material respects. Nothing in this presentation represents a guarantee of any future outcome. The author(s) are under no obligation to update this document, notify any recipients, or re-publish the content contained herein in the event that any factual assertions, assumptions, forward-looking statements, or opinions are subsequently shown to be inaccurate.

Certain information contained in this Communication constitutes "forward-looking statements," which can be identified by the use of forward-looking terminology such as "may", "will", "should", "expect", "anticipate", "target", "project", "estimate", "intend", "continue" or "believe" or the negatives thereof or other variations thereon or comparable terminology. Forward-looking statements made in this communication are based on current expectations, speak only as of the date of this communication, as the case may be, and are susceptible to a number of risks, uncertainties and other factors. Assumptions relating to the foregoing involve judgments with respect to, among other things, projected inflation, the regulation of digital assets and macroeconomic policy, all of which are difficult or impossible to predict accurately and many of which are beyond our control. In light of the significant uncertainties inherent in the forward-looking statements included herein, the inclusion of such information should not be regarded as a representation to future results or that the objectives and plans expressed or implied by such forward-looking statements will be achieved.

Certain information contained herein may have been obtained from third party sources and such information has not been independently verified by the author(s). References herein to third parties are for illustrative purposes and are not an endorsement or recommendation for products or services. No representation, warranty, or undertaking, expressed or implied, is given to the accuracy or completeness of such information. While such sources are believed to be reliable, the author(s) do not assume any responsibility for the accuracy or completeness of such information.

The information and any disclosures provided herein do not constitute a solicitation or offer to purchase any security or other financial product or investment and is not intended as investment, tax, or legal advice. Unless otherwise noted, all information is estimated, unaudited and may be subject to revision without notice. Past results are not indicative of future results.