February 2023 Outlook
Bloomberg Galaxy Crypto Index (BGCI)
Bloomberg Galaxy DeFi Index (DEFI)

Bloomberg Intelligence: Crypto Outlook

Bottoms are Rarely Easy

- Bottoms Aren't Typically Easy: Crypto Risk vs. Ebbing Tide, Fed
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- Ethereum Layer-2 Network Effects Draw Users, Blockbuster Brands
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Learn more about Bloomberg Indices

Most data and outlook as of February 2, 2022

BI CRYP (the crypto asset dashboard)

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Note - Click on graphics to get to the Bloomberg terminal

Bottoms Aren't Typically Easy: Crypto Risk vs. Ebbing Tide, Fed

Performance: Bloomberg Galaxy Cypto Index (BGCI)
Jan. +42%, One-year to Feb. 2: -42%
Bloomberg Galaxy DeFi Index (DeFi)
Jan. +51%, One-year to Feb. 2: -48%
Bitcoin *Jan. +38%, One-year to Feb. 2: -36%*
Ethereum *Jan. +32%, One-year to Feb. 2: -38%*

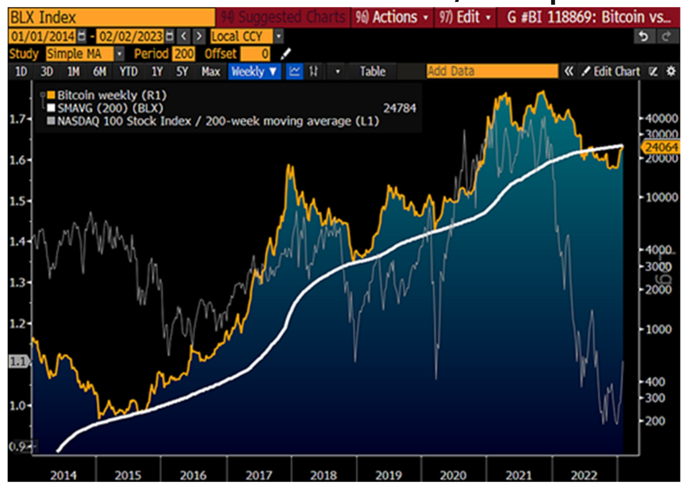
(Bloomberg Intelligence) -- Central-bank actions have delayed impacts, and most risk assets fall in recessions. That could spell trouble for cryptos, which are among the riskiest. The federal funds rate has gone from zero a year ago to almost 5% and is still rising, and that may portend early days of what we see as a severe economic reset. January's bounce in almost everything that went down in 2022 puts us on alert for a bear market rally. The crypto low may have come with FTX's demise, but a scenario more akin to the collapse of Lehman Brothers is also possible, where the trough came much lower about six months later.
Our long-term upward bias for the crypto market as measured by the Bloomberg Galaxy Crypto Index may gain fuel if markets are similar to 2008-09 and 2001-02. V-shaped bottoms typically don't cleanse excesses for enduring recoveries.

Bottom or Bear Market Bounce

Bear Market Bounce, Bottom or Both: Cryptos vs. Ebbing Tide, Fed. January's performance was almost a mirror opposite of 2022 in most markets, and that may portend blips in trajectories. Markets typically make it difficult to identify bottoms, and the Federal Reserve is still tightening in February despite rising recession risks, and that should remain a headwind for most risk assets, particularly cryptos.

No Worries, the Fed Will Save Us? Bitcoin reached the steepest discount vs. its 200-week moving average at the end of 2022. This is a top reason for the January snapback, but the global economic ebbing tide remains unfavorable. The benchmark crypto is up about 45% in 2023 to Feb. 2 vs. around 15% for the Nasdaq 100 stock index, and that may portend the relative performance to expect when the stock market bottoms. In the three times in history that the stock index has dropped below its 200-week mean, the Fed was easing. Our graphic shows Bitcoin and the Nasdaq near this level.

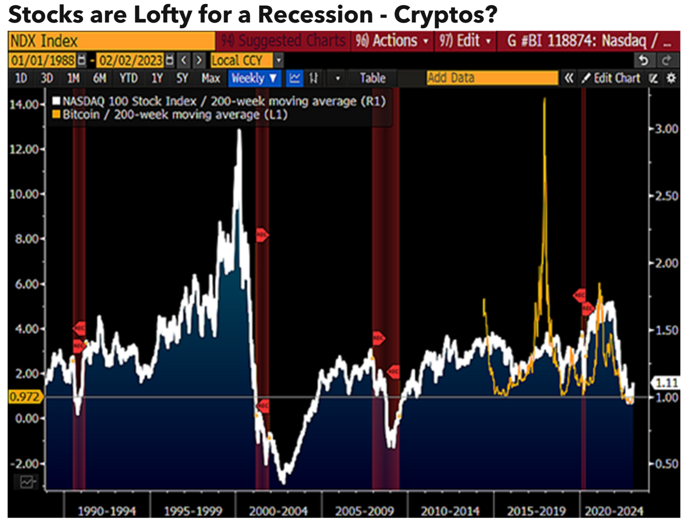
Bitcoin 200-Week Mean Faces the Fed, Nasdaq



Fed tightening despite the risk of recession could be a primary headwind for most risk assets, notably cryptos. Buy and hold strategies may benefit at the expense of the more speculative and leveraged, subject to rising volatility typical in bear markets.

Recessions and Cryptos: 2023 vs. 2002, 2009. Cryptos may be facing their first real recession, which typically means lower asset prices and higher volatility. The last significant US economic contraction, the financial crisis, led to the birth of Bitcoin, and the possible coming economic reset may mark similar milestones. A key question is how much price pain will there be before longer-term gains resume. Our graphic shows the Nasdaq 100 at parity with its 200-week moving average, relatively lofty based on the history of US recessions.

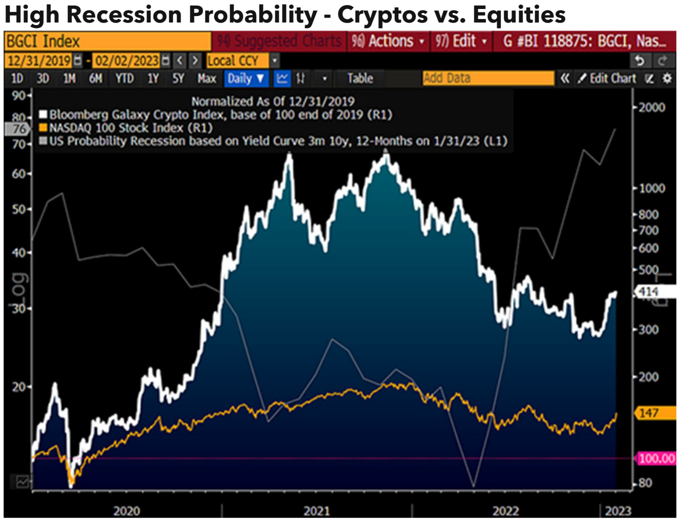
Stocks are Lofty for a Recession - Cryptos?



In 2002, the index bottomed at almost 70% below this mean, and about a 40% discount in 2009. We don't expect the crypto market to be spared if the risk-asset tide continues to recede. In the unlikely scenario of a soft landing, the Bloomberg Galaxy Crypto Index appears poised to resume beating most equity indexes.

January May Have Shown Crypto Win-Win. The Bloomberg Galaxy Crypto Index (BGCI) is up about 45% in 2023 to Feb. 2, compares with about 15% for the Nasdaq 100, which may be telling for relative performance. With the US yield curve showing the highest probability of recession in our database since 1992, it seems unlikely the indexes will avoid resuming the 2022 downward trajectory. If the BGCI drops about 30% and takes out the 2022 low, our graphic shows the index would still be up about 200% since the end of 2019 vs. around 40% for the stock index.

High Recession Probability - Cryptos vs. Equities



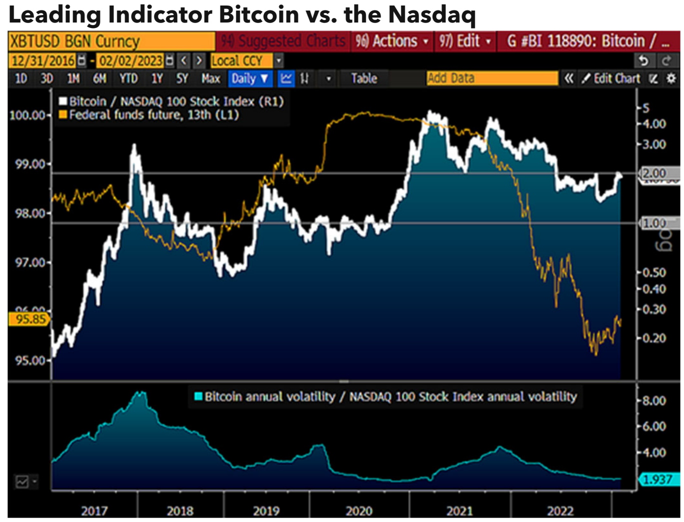
The pandemic was a major disruption that may shape markets for years. It sparked the greatest fiscal and monetary pump in history, and that's still in the process of dumping. Typically, risk assets bottom well after the Fed first eases, which remains quite distant at the start of February.

Musketeers - Bitcoin, Ethereum, Dollars

Digital Asset Mainstays: Bitcoin, Ethereum and Crypto Dollars. The maturing crypto market appears similar to the bottom process of 2018-19, with two key differences: the Fed is tightening and Ethereum is keeping up with Bitcoin. A foundation appears to be forming in Bitcoin vs. the stock market. The proliferation of crypto dollars supports our base case that US regulation is unlikely to mess it up.

Bitcoin vs. Nasdaq - Old Highs to New Lows. The elongated trend in the Bitcoin-to-Nasdaq ratio has been of ascent, and new highs may be a matter of time. First reaching one-to-one vs. the Nasdaq 100 stock index in 2017, parity with the crypto price acted as a pivot until 2020. Now the fulcrum for Bitcoin/Nasdaq is 2x. The benchmark crypto, gaining accolades as the world's most fluid 24/7 risk-asset leading indicator, still trades about 2x the volatility of the stock index, but it's the trajectory that matters, and Bitcoin's volatility is in decline vs. the Nasdaq.

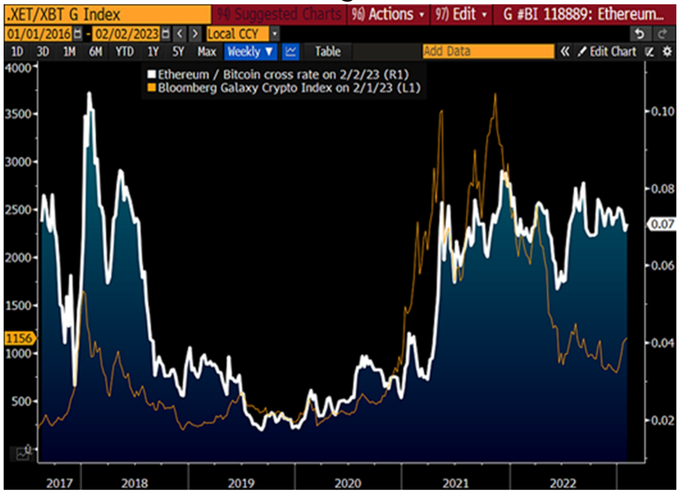
Leading Indicator Bitcoin vs. the Nasdaq



Our graphic shows the tendency for the crypto-to-stock ratio's direction to coincide with federal-funds-rate expectations. It may be a while before Bitcoin/Nasdaq gets to 4x, but a primary force to prod the Fed to ease is often a weaker stock market.

Ethereum: Divergent Strength in a Bear Market. The upward trajectory in the Ethereum/Bitcoin cross rate started in 2019 and shows few signs of abating. A resting bull market is our take on the cross between the No. 2 crypto and No. 1 Bitcoin, which is becoming a digital version of gold in a world going that way. The graphic shows the steady Ethereum/Bitcoin rate since the 2021 peak in the Bloomberg Galaxy Crypto Index. That suggests migration into the mainstream, and once the dust settles from some reversion in risk assets, Ethereum is more likely to resume doing what it's been doing: outperforming.

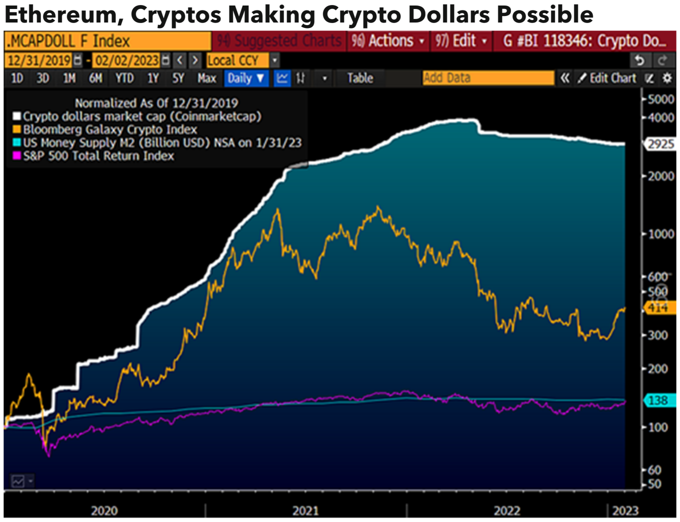
Ethereum/Bitcoin Cross Rising Broad Bear Market



Ethereum, which appears to be a technological revolution in financial markets akin to futures and ETFs, is a primary platform for tokenization, making possible the most widely traded digital assets, crypto dollars. Annual Ethereum volatility is about 1.4x that of Bitcoin.

Is the US Going to Mess this Up? There's a revolution in financial-market globalization taking place on the back of cryptos, and the dollar has become the base layer. Open discourse may be considered a US strength, notably compared with countries such as China, which appears to be pushing back on cryptos and free-market capitalism and is trying to launch its own central bank digital currency (CBDC). The graphic shows that the US dollar is already the dominant crypto asset -- and without any major action from the US government.

Ethereum, Cryptos Making Crypto Dollars Possible



Our expectation is the country that always will "do the right thing," in the quote attributed to Winston Churchill, is unlikely to mess up the crypto market, which has adopted the dollar as a base. The other part of the quote "after they have tried everything else," may describe the current US regulation and legislation dialogue.

Impact of Layer 2s on Ethereum

Jamie Douglas Coutts BI Senior Market Structure Analyst

Ethereum Layer-2 Network Effects Draw Users, Blockbuster Brands. Even as activity declined on the Ethereum base chain, 2022 was a pivotal year for the asset, as the adoption of NFTs and Web3 applications on Layer-2 chains drove massive network effects. Layer-2s (L2s) is an umbrella term for blockchain-scaling solutions that attempt to address the constraints that Ethereum currently confronts.

Why Ethereum Needs Layer-2 Solutions. Sharding in late 2023 is intended to alleviate scalability issues. In the meantime, L2s have stepped in to enhance the user experience and stop the flow of users to alternative layer-1 chains such as Solana, Avalanche.

Transaction Costs on Layer 2 vs. Ethereum

Transaction Costs on Layer 2 vs. Ethereum

Chain	Send ETH	Saving %	Swap Tokens	Saving %
Optimism	$ 0.06	-90%	$ 0.16	-90%
Arbitrum	$ 0.10	-83%	$ 0.15	-83%
Polygon Hermez	$ 0.25	-58%	-	-
Ethereum	$ 0.59		$ 2.96	

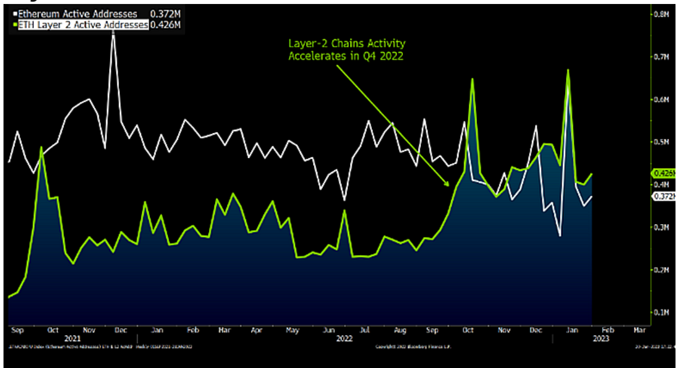
Bloomberg

Source: L2fees.info

Throughput and cost are Ethereum's two main limitations; it can handle only 15 transactions per second, and gas prices become unprofitable during periods of congestion. Leveraging the Ethereum Virtual Machine's (EVM) smart-contract technology, L2s chains are faster and up to 90% less expensive than transacting on Ethereum itself. To do this, they reduce the amount of gas used by compressing transactions and submitting them to the Ethereum base chain, utilizing it as the settlement layer. Negative trade-offs do exist, though, as centralized validation and technical limitations make L2s less secure.

Layer-2 Activity Eclipses That on the Base Chain. As mentioned in a note in October, the emergence of several hundred thousand new users via L2 chains, using blockchain advancements like optimistic rollups or zero-knowledge proofs, was a landmark development for the Ethereum ecosystem.

Layer-2 Era Arrived in 4Q22

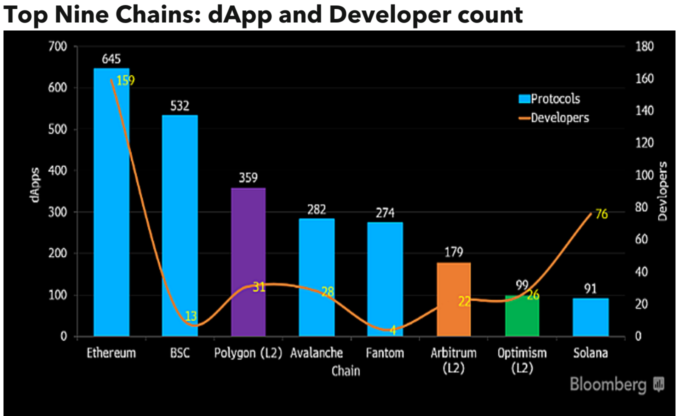


Source: ArtemisXYZ, Glassnode

After averaging 250,000 daily active addresses in the prior months, L2s erupted in October 2022 and overtook the base chain. They now consistently maintain more than 400,000 daily active addresses. Daily active addresses on rollup or L2 chains rose 86% in 2022, versus a 33% decline on Ethereum.

Polygon Becomes Beacon for Developers. No L2 has created more network effects for Ethereum than Polygon. Polygon started as a sidechain but pivoted to an aggregator of technologies focusing on zero-knowledge (zk) rollups. A blockchain game-changer, Zk proofs, a method of proving the possession of certain information without revealing any of the data itself, enhance privacy and speed up transactions.

Top Nine Chains: dApp and Developer count



Source: DeFillama

Of the entire worldwide blockchain economy, Polygon has the third-largest ecosystem for decentralized apps (dApps). Many of the most popular DeFi dApps on Ethereum, including Aave and Uniswap, have migrated over and are being developed on Polygon. Its 359 dApps is more than three times that of its closest L2 rival and half that of Ethereum. Additionally, the network has more developers than its closest alternative L1 rivals, Avalanche and Fantom.

Polygon Becomes Brand Name NFT, Web3 On-Ramp. Based on Polygon's string of brand-name partnerships in 2H22, this year could be the year of mainstream NFT adoption. The explosion in active users on the network stemmed from several blockbuster corporate partnerships struck by the company behind the network, Polygon Technology.

Polygon's Big Push Into the Mainstream

Source: Blockchain Council

Putting aside the potential regulatory issues which may arise from a traditional company's involvement in the issuance of its own token Matic, -- see upcoming Ripple/SEC court case -- the quality of the corporations it has brought on board bodes well for adoption potential. Companies like Coca-Cola, Starbucks, Reddit, and Meta have launched their NFTs as an introductory Web3 product or integrated with Polygon's NFT marketplaces.

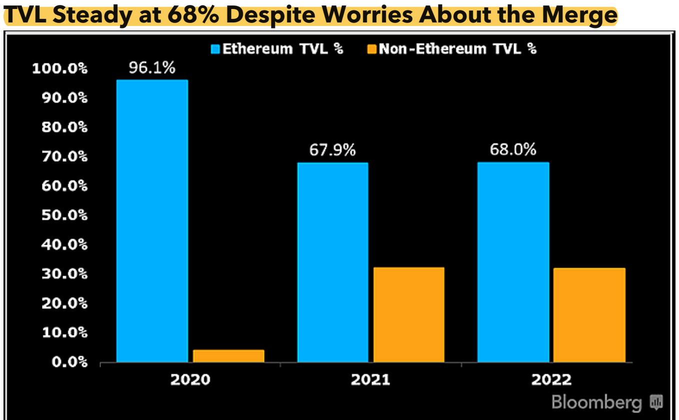
Ethereum to Permit Staking Withdrawals

Jamie Douglas Coutts BI Senior Market Structure Analyst

Ethereum $24 Billion in Staked Assets to Accelerate Upon Upgrade. Demand for Ethereum could spike in 2H as improving staking economics and a potential supply crunch coincide with EIP 4895, which allows staking withdrawals. Withdrawal restrictions have long been seen as a barrier for potential stakers.

The Merge in Rearview. Even as crypto markets prepared to accomplish one of the most complicated and difficult technical achievements in the history of the industry, Ethereum's share of smart contract value remained constant in 2022.

TVL Steady at 68% Despite Worries About the Merge

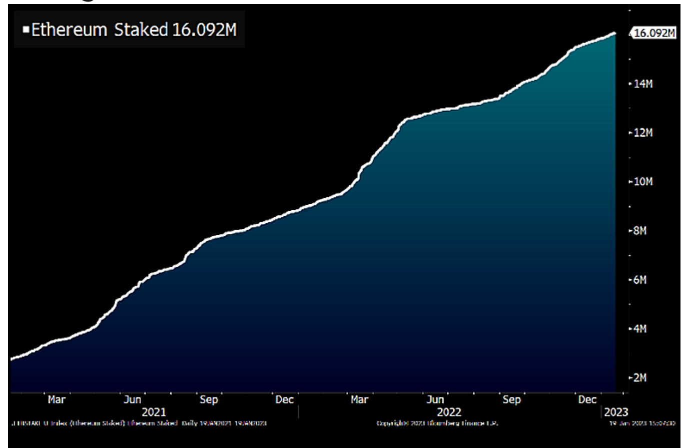


Source: Defillama

Total value locked (TVL), an imperfect metric for quantifying the total assets committed in various DeFi protocols and smart contracts, finished the year where it started, at 68%. Given the apprehension around the possible failure of the Merge, which could ruin the protocol, this was an impressive accomplishment.

Staked Ethereum Withdrawals Are Next. The Shanghai update (EIP 4895), the next major initiative for the network, will allow validators to unlock or withdraw their staked Ethereum plus accumulated rewards earned for securing transactions on the chain. To meet community demand for liquidity, this feature, postponed until after the switch from proof-of-work (the Merge), has been moved up to March.

Staking Rises 81% YoY to 16 Million ETH

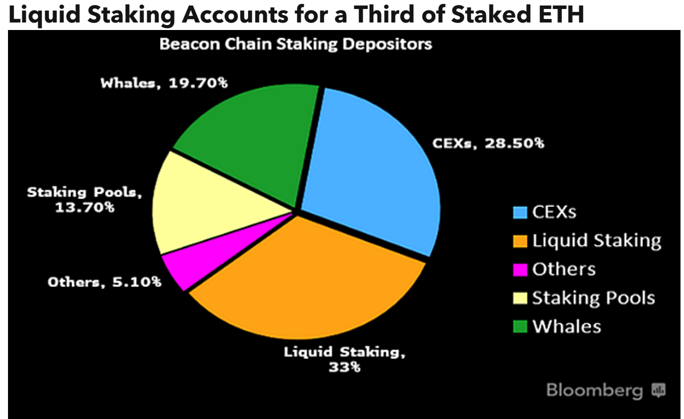


Source: Glassnode

By the time the Merge happened in September 2022, Ethereum staked had reached 13 million or $20 billion, illustrating the community's growing confidence in the network's viability. Since then, 3 million have been added -- bringing the total to 16 million or 13% of the circulating supply. This amount, which is locked in the protocol, also serves as a proxy for the network's security budget, or the amount it would cost to attempt an attack.

Liquid Staking Derivatives. The ecosystem addressed the challenge of liquidity for new staking demand by creating Liquid Staking Derivatives (LSDs) protocols in 2020.

Liquid Staking Accounts for a Third of Staked ETH



Source: Dune Analytics

By depositing Ethereum into contracts from LSDs such as Lido, holders bypass Ethereum's protocol restraints -- such as illiquidity and a minimum of 32 Ethereum needed -- by staking directly or via avenues such as exchanges or pools. Individuals receive a derivative (stETH) in exchange, and the protocol charges a fee of about 10%. Composability with DeFi protocols, which enables LSD token holders to borrow, lend, and provide liquidity, has also aided in quick market-share growth. Even though higher capital efficiency may be appealing to LSD holders, the recursive structure of LSDs in DeFi as well as Lido's 29% and growing market share bring with them centralization and systemic problems.

EIP 4895 Could Spur Staking Demand. Although exit liquidity will be available to stakers for the first time, the introduction of LSDs and Ethereum's favorable staking economics should see the staking ratio relative to alternative Layer-1 chains start to narrow substantially.
According to our network adoption model, Ethereum remains the dominant L1 ecosystem, but without clear exit liquidity rules, the percentage staked remains significantly below the 60.1% average for alternative L1 chains. However, with a real yield of 5% (ex-MEV) -- captured via a 75% blockchain revenue dominance and boosted by the scaling efforts of L2s as well as protocol upgrades such Danksharding -- staking demand is likely to climb both in absolute and relative terms. Closing the staking gap would see inflows of about $89 billion to the protocol.

Ethereum's Staking Ratio Is Below Competitors'

Network	Staking Yield % (Adj/Real)	Staking Market Cap $'B	Market Cap $'B	Staking %
Ethereum	5.13	24.5	189	13.0
Cardano	-0.17	8.6	12	71.7
BNB Chain	8.61	6.9	39	96.6
Avalanche	2.58	4.2	5	62.5
Polkadot	6.97	3.4	6.9	45.5
Polygon	2.55	3.3	8.5	39.4
Tron	1.55	2.5	5.5	44.9
Average ex-Ethereum	3.7	4.8		60.1

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Source: Staking Rewards

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{CRYP} Page on the Bloomberg Terminal

Standard | Cryptocurrency Monitor

Index	Last	Net Chg	% Chg	Open	Yest Close	2D Chart	30D Range	Time
1) BGCI Bloomberg Galaxy	1186.87	+30.47	2.63%	1186.87	1186.87			02/02

Crypto Assets	Last	Net Chg	% Chg	Bid	Ask	2D Chart	30D Range	Time
11) Bitcoin	23432.11	-27.94	-0.12%	23430.55	23433.66			05:47
12) Ethereum	1644.268	+7.218	+0.44%	1643.960	1644.586			05:47
13) Binance Coin	325.2495	+1.5127	+0.47%	325.1370	325.1372			05:47
14) XRP	0.4136	+0.0042	+1.03%	0.4136	0.4136			05:47
15) Cardano	0.4021	+0.0060	+1.51%	0.3940	0.4000			05:47
16) Solana	24.4500	+0.0410	+0.17%	24.4000	24.4100			05:47
17) Dogecoin	0.0921	+0.0011	+1.21%	0.0919	0.0919			05:47
18) Polkadot	6.7505	+0.2205	+3.38%	6.6850	6.8160			05:47
19) Avalanche	21.2125	-0.0033	-0.02%	21.2120	21.2130			05:47
20) TRON	0.0642	+0.0004	+0.63%	0.0641	0.0642			05:47
21) Polygon	1.1848	-0.0064	-0.54%	1.1840	1.1840			05:47
22) Litecoin	98.607	+0.453	+0.46%	98.577	98.635			05:47
23) Cronos	0.0790	-0.0011	-1.37%	0.0778	0.0802			05:47
24) Bitcoin Cash	138.41	+1.98	+1.45%	138.35	138.48			05:47
25) Chainlink	7.2197	+0.1188	+1.67%	7.1700	7.2025			05:47

Futures	Last	Net Chg	Volume	Open	Settle	2D Chart	30D Range	Time
31) CME Bitcoin	23585	-420	967	23665	24005			05:45
32) CME Ether	1655.50	-34.50	1109.00	1667.50	1690.00			05:46

More Crypto Assets and Sources | DAS »

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41)	Billionaire Draper Pitches Sri Lanka on Bitcoin, Gets Rejected	BN	01:32
42)	India Reveals IMF is Working With G-20 for Crypto Regulations	DES	03:08
43)	Crypto Miner Marathon Made First Bitcoin Sales as Token Soared	BN	02/02
44)	India Reveals IMF is Working With G-20 for Crypto Regulations	DES	03:08
45)	Binance Returns to Korean Crypto Market Through Stake in GOPAX	BN	02:00

(6:00am EST, Feb. 2)

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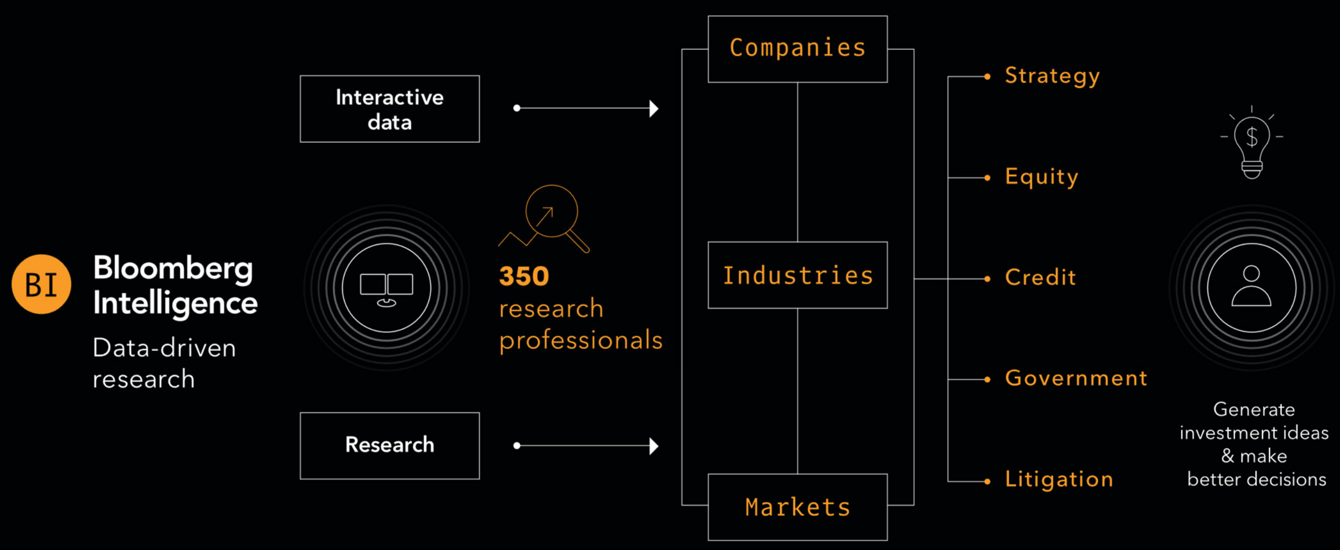

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