Bloomberg Intelligence BD

CONTENTS

- **3** Overview
- 3 Risk Assets vs. The Fed
- **4** 2022 Foundation from 2021
- **5** Crypto Stalwarts Bitcoin, Ethereum, Dollars
- **6** Bitcoin vs. Gold vs. Silver, Equities

Learn more about Bloomberg Indices

Most data and outlook as of January 5, 2022

Mike McGlone - BI Senior Commodity Strategist

BI COMD (the commodity dashboard)

It's Bitcoin, Ethereum, Dollars and 16,000 Wannabes vs. the Fed

Performance: Bloomberg Galaxy Cypto Index (BGCI)

December -23%, One Year to January 5: +90%

Bloomberg Galaxy DeFi Index (DeFi)

December -15%, One Year +99%

Bitcoin December -19%, One Year +29% Ethereum December -20%, One Year +228%

(Bloomberg Intelligence) -- Rising risk assets in 2022 may embolden a Federal Reserve facing the greatest inflation in four decades, and in the process favor Bitcoin. Crypto assets are tops among the speculative and risky, but the first born is rapidly transitioning toward becoming the world's digital reserve asset. We expect the enduring trio -- Bitcoin, Ethereum and crypto dollars -- to maintain dominance. The top 2021 upcomers -- Binance Coin and Solana -- may end the pattern of temporary visitors among the top five. The dog-coin speculation pumps of 2021 -- Dogecoin and Shiba Inu -- indicated the excesses in cryptos that are ripe for purging in 2022. The "don't fight the Fed" mantra may already be pressuring the broad crypto market, with companionship from peaking commodities.

Risk Assets vs. The Fed

Bitcoin \$30,000 and Ethereum \$2,000 Set

Underpinnings for 2022. Up about 150% in 2021, we see the Bloomberg Galaxy Crypto Index marching higher in 2022, but among the riskiest of assets, cryptos must manage Federal Reserve tightening. A top force to stop central-bank restraint is a decline in the stock market, with implications for cryptos. In most scenarios, Bitcoin may come out ahead.





Note - Click on graphics to get to the Bloomberg terminal

Bitcoin, Ethereum Have Solid Bases to Build On. Price supports exiting 2021 of about \$30,000 for Bitcoin and \$2,000 for Ethereum appear solid. At about 80% of the Bloomberg Galaxy Crypto Index, we expect the top two cryptos to remain dominant and continue advancing in 2022. A risk-off swoon like that of 2020 may put those key supports in play but is unlikely. What's more probable, we think, is Bitcoin heading toward \$100,000 and Ethereum breaching \$5,000 resistance. A key issue we see is the Federal Reserve, as it faces the greatest inflation in four decades, more inclined to raise interest rates if risk assets continue climbing.

Cryptos are tops among the risky and speculative. If risk assets decline, it helps the Fed's inflation fight. Becoming a global reserve asset, Bitcoin may be a primary beneficiary in that scenario.

Bitcoin May Gain Upper Hand vs. Stocks in 2022.

Expectations for Federal Reserve rate hikes in 2022 may support a win-win scenario for Bitcoin vs. the stock market. Our graphic depicts the 13th fed funds future indicating a level around 1% at the end of 2022 vs. a target of zero now. A reason to take back liquidity is the fact that the S&P 500 is the most extended above its 60-month moving average in over two decades. Stretched markets have become common, but commodities and Bitcoin appear to be early reversion leaders. It's a question of bull-market duration, and we see the benchmark crypto coming out ahead.

Top Force to Stop Fed Tightening - Wobbly Equities



No supply elasticity and being in the early adoption days favor an upward bias for Bitcoin's price, if the rules of economics apply. A top force to shift the Fed back to easing is a drop in equity prices, which supports the digital store-ofvalue.



Fed Taking Away the Punch Bowl and Cryptos. Peaking commodities and cryptos, alongside declining Treasury yields in 4Q, may indicate normalization of stock market returns in 2022. If the S&P 500 retreats and stays down awhile, we expect Bitcoin to come out ahead, following rising bond prices and gold. Yet among the three, the digital asset has the highest volatility. Our graphic depicts the Bloomberg Galaxy Crypto Index peak in November, as federal-funds futures prices accelerated rate-hike expectations for 2022-23. Long risk assets at the start of 2022 may be fighting the Fed.





Crypto tops the speculative excesses and may be an early indicator that the broader market tide is due to recede. Peaks in meme coins Dogecoin and Shiba Inu have coincided with similar market highs, emphasizing the leading indications from crypto.

2022 Foundation from 2021

Bitcoin's 2022 Foundation Rests on 2021 Hash-Rate Reset, China. Having recovered from the 2021 hash-rate crash and price swoon, Bitcoin appears on sound footings at the start of 2022. At about the same price on Jan. 5 as in February 2021, the benchmark crypto is a consolidating bull market, as we see it, more likely to resume its enduring upward trajectory.

Bitcoin Following 10x Price Appreciation Increments.

Bitcoin withstood an unprecedented plunge and subsequent recovery in its hash rate in 2021, which should solidify the crypto's price foundation for 2022. Our graphic depicts the last time the network computing power measure from Coinmetrics had a similar decline as the roughly 50% seen last year. The hash rate's 10-day average dropped about 30% in 2018, and Bitcoin bottomed around \$3,000. In 2021, the drawdown to about \$30,000 from \$60,000 supports our view that the crypto should continue to appreciate in 10x increments.

\$30,000 2021 Dip May Be New \$3,000 From 2018



As in 2018, we think the 2021 hash-rate crash solidified Bitcoin's price foundation. Banned from China, much of Bitcoin mining has shifted to North American publicly traded companies, many of which are more inclined to hold coins, not sell them. Investors in the miners gain indirect exposure to cryptos.

Investor Accumulation of Bitcoin Is Accelerating. In a world going digital, Bitcoin is the benchmark crypto asset and its supply is limited. This may be the bottom line for most investors to avoid what is becoming a greater risk: zero allocation. Our graphic depicts the top companies accumulating Bitcoin according to BitcoinTreasuries. Tesla and MicroStrategy have been the stalwarts, but what's notable is two of the top five are crypto miners. We may look back at 2021 as a paradigm shift in crypto-asset maturation. Miners banned from China have migrated toward destinations with free-market capitalist foundations.

Bitcoin Joining Portfolios May Be Early Days Bitcoin Treasuries NE

BitcoinTreasuries.NET by @NVK		Symbol	Market Cap	% BTC	Purchases/Filings	Cost Basis USD	Today's Value	
MicroStrategy LLC	US	NADQ:MSTR	\$5,273,054,223	101%	filing	√\$3,750,863,658	\$5,322,902,355	
Tesla, Inc.	US	NADQ:TSLA	\$757,554,688,042	0.2%	Ann (estimate 48k btc)	√\$1,500,000,000	\$1,848,601,440	
Marathon Digital Holdings	US	NADQ:MARA	\$3,039,918,458	11%	Jan25th Ann	√\$188,619,500	\$348,014,626	
Square inc.	US	NADQ:SQ	\$66,188,438,377	0.5%	50M,Bitcoin Investment Whitepar	√\$220,000,000	\$343,488,976	
Hut 8 Mining Corp	CA	NADQ:HUT	\$1,505,986,492	15%		√\$47,223,111	\$224,314,091	
Coinbase Global, Inc.	US	NADQ:COIN	\$50,407,349,115	1%	S1 filling	? \$348,014,626	\$348,014,626	
Riot Blockchain, Inc.	US	NADQ:RIOT	\$2,499,546,014	7.6%	\$7.2M on Jun-30-2020	√ \$38,920,000	\$191,022,149	
Galaxy Digital Holdings	CA	TSE:GLXY	\$2,142,954,801	8%	\$134M on Jun-30-2020	? \$171,166,800	\$171,166,800	
Bitcoin Group SE	DE	ADE.DE	Not on G.F. ■	-	Fin report	? \$157,173,914	\$157,173,914	
Bitfarms Limited	CA	NASDAQ:BITF	\$1,153,952,829	12.4%	Ann	? \$29.937.350	\$142,753,111	

Bumps in the road should be expected in a nascent technology/asset, and 2021 was a whopper. Bitcoin has overcome the obstacle and appears on a sounder footing for it.

Why Complicate a Bitcoin Bull Market? Bitcoin is a risk asset that's evolving into a digital reserve asset in a world going that way, with positive implications for its price. Demand and adoption are rising and still appear in the early days vs. supply, which is declining. The key question at the start of 2022 is whether Bitcoin is too hot, and our chart shows the crypto fairly priced at about its upward-sloping 50-week moving average. Not too extended and within an upward trajectory sets the stage for a potentially strong year.

Bitcoin Appears as a Consolidating Bull Market

Bitcoin started 2021 around 140% above its annual mean.



The overextended condition a year ago has been relieved, and it's now a question of a consolidating bull or the beginning of a reversal. Or bias is with the former, on the back of favorable demand vs. supply fundamentals. About \$100,000 is good target resistance.

Crypto Stalwarts - Bitcoin, Ethereum, Dollars

Bitcoin, Ethereum, Dollars: Top Triplets vs. Crypto **Speculators.** Crypto assets exemplify global free-market capitalism, and a top winner has been the dollar. Mainstays Bitcoin, Ethereum and crypto dollars are poised to stay atop the ecosystem vs. about 16,000 rivals jockeying for speculative leadership, if past patterns repeat. Binance Coin and Solana have replaced Litecoin and XRP near the top compared with a year ago.

Consistency at the Top: Bitcoin, Ethereum, Tether.

Enduring crypto-market trends include the proliferation of crypto dollars, Bitcoin becoming general collateral and Ethereum building the platform for decentralized finance (DeFi), fintech and non-fungible tokens (NFTs). Our graphic of the top five cryptos from Coinmarketcap shows consistency in the top three: Bitcoin, Ethereum and Tether. The rapid adoption of crypto dollars is noteworthy, with Tether predominant. There are numerous Tether wannabes, showing the significance of the greenback in the crypto ecosystem: The buck is in demand more than all other fiat currencies for transactions.

Bloomberg

Bloomberg Intelligence BD



Tether, Ethereum and Bitcoin vs. 16,000 Wannabes

# 🔺	Name	Coinmarketcap Jan. 6. 2022	Price	24h %	7d %	Market Cap 📵
1	Bitcoin BT	С виу	\$46,022.50	▲0.29%	▼ 3.07%	\$870,089,063,292
2	Ethereum	ETH Buy	\$3,759.36	▼ 0.74%	▲0.23%	\$447,897,005,036
3	Binance Coin	BNB Buy	\$508.12	▲0.02%	▼ 2.89%	\$84,780,562,256
4	Tether US	DT Buy	\$1.00	▼ 0.00%	~ 0.01%	\$78,449,125,301
5	Solana SO	L Buy	\$164.45	▼ 2.16%	▼ 6.52%	\$50,930,271,487

There's little to stop Bitcoin from becoming the global digital-reserve asset, and plenty of so-called Ethereum-killers coming and going. Coinmarketcap lists about 16,000 cryptos at the start of 2022 vs. 8,000 a year ago.

What's Consistent? Change Among the Other Two.

Interchange among mostly speculative crypto assets competing with Bitcoin, Ethereum and Tether is a pattern that should instill investor caution. Our graphic of the leading cryptos on Coinmarketcap from this time last year showed Litecoin and XRP among the top five. A year later, they've dropped (to No. 22 and No. 8, respectively). It's this enduring jockeying for position among top cryptos, often driven by hype and speculation, that leads us to view most that rise swiftly to the top with trepidation. Bitcoin, Ethereum and crypto dollars are exceptions.

This Graphic a Cautionary Tale for Posers

Rank	Name	Coinmarketcap	Symbol	Symbol Market Cap			
1	Bitcoin	Jan. 3, 2021	BTC	\$609,409,213,147.03	\$32,782.02		
2	♦ Ethereum		ETH	\$111,309,985,610.91	\$975.51		
3	1 Tether		USDT	\$21,340,101,768.04	\$1.00		
4	Litecoin		LTC	\$10,610,100,156.81	\$160.19		
5	⊗ XRP		XRP	\$10,254,417,776.80	\$0.2258		

Shiba Inu in 2H and Dogecoin in 1H are examples of speculative hype-coins better classified as fun for gamblers on an unprecedented 24/7 global scale.

Crypto Dollar Proliferation and Ethereum. The potentially unstoppable proliferation of crypto dollars is a principle reason we expect digital assets to keep appreciating. It's normal for rapidly advancing technology to face regulation and pushback from those being disrupted, but we see a revolution in stable coins tracking the dollar, which has underpinnings in Ethereum. The ability to transact and transmit dollars 24/7 with instant settlement, and to earn interest well above eurodollars, are attributes of crypto dollars. This buoys the greenback and trickles down to most financial assets.

Top Digital-Asset Bull Market: Crypto Dollars



Bumps should be expected, but the advent of central-bank digital currencies has already happened organically and the world has gone for the dollar. Our graphic depicts the rising market cap of crypto dollars from Coinmarketcap and outperformance of Ethereum vs. Bitcoin.

Bitcoin vs. Gold vs. Silver, Equities

Bitcoin Doing to Gold What the Precious Metal Did to

Silver. The bodies-in-motion rule of physics may pertain to Bitcoin, notably vs. gold and potentially vs. most risk assets. Forces that may stop fund flows out of the precious metal and into the crypto appear less probable than just more of the same or even an acceleration of existing trends. Bitcoin volatility is in decline vs. most asset classes.

What Keeps Bitcoin From Replacing Gold in Portfolios?

There may be little to stop what Bitcoin is doing to gold, akin to what the metal has done to silver. We began to take Bitcoin seriously when the dollar price of the crypto surpassed the per-ounce value of gold in 2017, and that trend seems to be gaining endurance. Our graphic depicts the upward trajectory of the Bitcoin-to-gold ratio at about 25x at the start of 2022 vs. closer to 18x a year ago. Gold is clearly being replaced in portfolios, as evidenced by the roughly 9% year-over-year decline in total known exchangetraded-fund holdings of the metal to Jan. 5.

Bitcoin Beating Gold Appears Enduring



About the same as it was in 1986, the gold-to-silver ratio at about 79x appears low due to the distortions of the pandemic. We see gold more likely to advance toward \$2,000 an ounce in 2022, but Bitcoin to increase at a greater

Bitcoin Gaining Upper Hand vs. the Stock Market. It

makes sense that the risks of a nascent asset/technology would decline relative to the mainstream over time, if the newcomer is gaining adoption. This is the situation with Bitcoin and we ask, why complicate the trend? Our graphic depicts the rising annual trajectory of the benchmark crypto price overlaid with its declining volatility vs. the Nasdaq 100 Stock Index. At about 4x at the start of 2022, Bitcoin's 260day volatility vs. the Nasdaq compares with about 12x in 2013 and 8x in 2017.

Bitcoin Volatility in Decline vs. Most Assets



With the Federal Reserve facing the greatest inflation in four decades, a leading force that may alleviate expected rate hikes is a pickup in stock market volatility. It's likely that Bitcoin's relative risk measures will continue declining vs. equities.



{CRYP} Page on the Bloomberg	Terminal							
Index	Last	Net Chg	% Chg			2D Chart	30D Rng	Time
1) BGCI Bloomberg Galaxy	2465.19	-136.47	-5.25%	2550.20	2601.66	~~~ <u> </u>	•	- 07:16
Bid/Ask Data Network Data (Supplied by Mosaic)								USD -
Coins	Last	Net Chg	% Chg	Circ Supply	Market Cap 1		USD Volume	
11) Bitcoin	42803.14	-800.74	-1.84%	18.92M				B 07:17
12) Ethereum	3342.252	-212.113	-5.97%	119.04M	397.86B	489.33k		B 07:17
13) XRP	0.7475	-0.0435	-5.50%	50.49B	37.74B	78.63M	60.74	M 07:16
10 Litecoin	133.515	-2.657	-1.95%	69.35M	9.26B	659.14k	92.10	M 07:16
15) Bitcoin Cash	390.96	-13.11	-3.24%	18.95M	7.41B	45.38k	18.50	M 07:17
10 Ethereum Classic	30.926	-1.600	-4.92%	132.11M	4.09B	191.31k	6.22	M 07:16
17) Monero	198.050	-9.757	-4.70%	18.06M	3.58B	10.84k	2.27	M 07:16
18) EOS	2.8472	-0.1108	-3.75₺	943.75M	2.69B	8.53M	25.56	M 07:16
19) Zcash	132.137	-6.598	-4.76%	13.46M	1.78B	33.72k	4.66	M 07:17
20) Dash	120.184	-5.579	-4.44%	10.52M				M 07:16
Futures	Last	Net Chg	Volume	0pen		2D Chart	30D Rng	Time
21) CME Bitcoin	42715	-1115	1679	43405	43830	~~~ ·	•	- 07:16
22) CME Ether	3331.50	-248.00	2337.00	3540.50	3579.50	- V	•	- 07:16
Cryptocurrency News More »								
31) Crypto Security Is Biggest Concern for Institutional Investors								02:00
32) Bitcoin Declines to Lowest Level Since December's Flash Crash								02:46
33) ✓ It's Bitcoin, Ethereum, Dollars and 16,000 Wannabes vs. the Fed								06:06
30 Daily FX: Bitcoin, Ether lead the Decline in Cryptocurrencies after Hawkish Fed Minutes Released							NS1	07:14 型
35) CoinQuora: Bitcoin Price Falls Again as Crypto Market Faces Bearish Position								07:13 🖳
30 U.S. Dollar Index (DX) Futures Technical Analysis – Strengthens Over 96.475, Weakens Under 95.885								07:08
37) Here is the City: What Konami Castlevania NFTs are and why fans are unhappy								07:07
38) Bitcoin, Bed Bath & Beyond, Walgreens, Exxon: What to Watch When the Stock Market Opens Today								07:05
39) Protests in Kazakhstan: five things you need to know								07:04
40) Why Video Game Makers See Huge Potential In Blockchain-And Why Problems Loom For Their New N							. FOR	07:00
41) Inside Bitcoins: Bitcoin Price Prediction: BTC/USD Trades Below \$45,000 as Bears Show-up Heavily							NS1	06:56
42) Cointelegraph: Hong Kong real estate giant leads \$90M raise for crypto bank Sygnum							NS1	06:56
(7am NY, January 6)								

About Bloomberg Intelligence

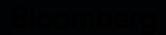
Your go-to resource for making better investment decisions, faster.

Bloomberg Intelligence (BI) research delivers an independent perspective providing interactive data and research across industries and global markets, plus insights into company fundamentals. The BI team of 350 research professionals is here to help clients make more informed decisions in the rapidly moving investment landscape.

BI's coverage spans all major global markets, more than 135 industries and 2,000 companies, while considering multiple strategic, equity and credit perspectives. In addition, BI has dedicated teams focused on analyzing the impact of government policy, litigation and ESG.

BI is also a leading Terminal resource for interactive data. Aggregated from proprietary Bloomberg sources and 500 independent data contributors, the unique combination of data and research is organized to allow clients to more quickly understand trends impacting the markets and the underlying securities.

Bloomberg Intelligence is available exclusively for Bloomberg Terminal® subscribers, available on the Terminal and the Bloomberg Professional App.



Bloomberg Intelligence by the numbers.

350+

research professionals

135+

industries

500+

data contributors

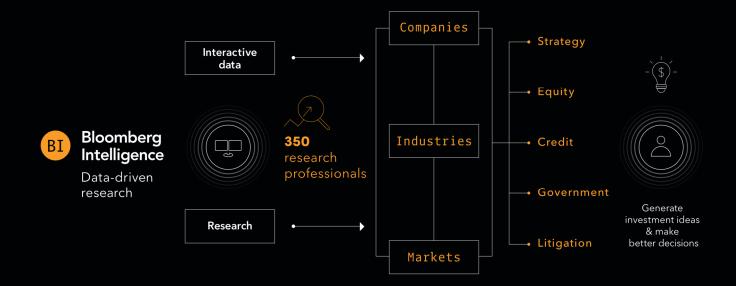
15 yrs

2,000+

companies

21

markets covered



Take the next step.

For additional information, press the <HELP> key twice on the Bloomberg Terminal®.

Beijing Hong Kong +86 10 6649 7500 +852 2977 6000 Dubai +971 4 364 1000 +44 20 7330 7500 Frankfurt Mumbai +49 69 9204 1210 +91 22 6120 3600

New York Singapore +1 212 318 2000 +65 6212 1000 San Francisco Sydney +1 415 912 2960 +61 2 9777 8600 São Paulo Tokyo +55 11 2395 9000 +81 3 4565 8900

bloomberg.com/bi

The data included in these materials are for illustrative purposes only. The BLOOMBERG TERMINAL service and Bloomberg data products (the "Services") are owned and distributed by Bloomberg Finance L.P. ("BFLP") except (f) in Argentina, Australia and certain jurisdictions in the Pacific islands, Bermuda, China, India, Japan, Korea and New Zealand, where Bloomberg L.P. and its subsidiaries ("BIP") distribute these products, and (ii) in Singapore and the jurisdictions serviced by Bloomberg's Singapore office, where a subsidiary of BFLP distributes these products. BLP provides BFLP and its subsidiaries with global marketing and operational support and service. Certain features, functions, products and services are available only to sophisticated investors and only where permitted. BFLP, BLP and their affiliates do not guarantee the accuracy of prices or other information in the Services. Nothing in the Services shall constitute or be construed as an offering of financial instruments by BFLP, BLP or their affiliates, or as investment advice or recommendations by BFLP, BLP or their affiliates of an investment strategy or whether or not to "buy", "sell" or "hold" an investment. Information available via the Services should not be considered as information sufficient upon which to base an investment decision. The following are trademarks and service marks of BFLP, a Delaware limited partnership, or its subsidiaries: BLOOMBERG, BLOOMBERG ANYWHERE, BLOOMBERG MARKETS, BLOOMBERG NEWS, BLOOMBERG PROFESSIONAL, BLOOMBERG TERMINAL and BLOOMBERG.COM. Absence of any trademark or service mark from this list does not waive

Bloomberg's intellectual property rights in that name, mark or logo. All rights reserved. © 2022 Bloomberg.
Bloomberg Intelligence is a service provided by Bloomberg Finance L.P. and its affiliates. Bloomberg Intelligence shall not constitute, nor be construed as, investment advice or investment recommendations Bloomberg Intelligence is a service provided by Bloomberg Finance L.P. and its affiliates. Bloomberg Intelligence shall not constitute, nor be construed as, investment advice or investment recommendations (i.e., recommendations as to whether or not to "buy", "sell", "hold", or to enter or not to enter into any other transaction involving any specific interest) or a recommendation as to an investment or other strategy. No aspect of the Bloomberg Intelligence function is based on the consideration of a customer's individual circumstances. Bloomberg Intelligence should not be considered as information sufficient upon which to base an investment decision. You should determine on your own whether you agree with Bloomberg Intelligence Intelligence Credit and Company research is offered only in certain jurisdictions. Bloomberg Intelligence should not be construed as tax or accounting advice or as a service designed to facilitate any Bloomberg Intelligence subscriber's compliance with its tax, accounting, or other legal obligations. Employees involved in Bloomberg Intelligence may hold positions in the securities analyzed or discussed on Bloomberg Intelligence.

