

# Bitcoin Brief

## MARKET UPDATE

Bitcoin ended the year up 57%. As the chart below illustrates, bitcoin was again the best performing major asset class for the year. It's the 9<sup>th</sup> time in the asset's 11 full calendar years of performance history that it's topped the chart, and it handily beat its closest competitors Commodities (+40%), REITs (+33%), and U.S. Large Cap (+29%).

Despite a strong calendar year, December was a tough month for bitcoin, which fell over 20% for the month. December started with a continuation of the COVID-driven sell-off bitcoin investors experienced during the last three weeks of November. Volatility spiked heading into the first weekend of the month, punctuated by a sharp price drop late Friday night into the early hours of Saturday. No single piece of news triggered the sell-off; rather, weak price action throughout the week spilled over into the Asian trading session and was potentially accelerated by leveraged trading platforms. Bitcoin rallied heading into the Christmas break but was unable to stay above its 200-day moving average, a critical technical level, as the year closed.

Periods like December, as well as the below visual, remind investors that bitcoin remains a highly volatile asset. However, when appropriately sized based on an investor's risk tolerance and objectives, bitcoin can drive meaningful portfolio returns.

## MARKET STATS.

As of 12/31/21

BTC Price	\$45,868
BTC Market Cap	\$895B
% of BTC Total Supply in Circulation	90%
3M Average Daily Bitcoin Transactions	~270K

## NOTEWORTHY HEADLINES.

[NYDIG Announces \\$1 Billion Funding Round Led by WestCap](#)

[Florida Businesses May Soon Be Able to Pay State Fees in Crypto](#)

[Senators Seek Clarity on Crypto Rules in Infrastructure Law](#)

[Idaho Central Credit Union Launches NYDIG Bitcoin Services via Alkami](#)

[Chainalysis Launches Support for the Lightning Network](#)

[Meta's WhatsApp to Allow Crypto Payments through Novi Wallet](#)

[Goldman Sachs, Other Wall Street Banks Exploring Bitcoin-Backed Loans](#)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Top Performers	Bitcoin +1,426.7%	Bitcoin +189.1%	Bitcoin +5,428.7%	REITs +23.3%	Bitcoin +34.2%	Bitcoin +124.3%	Bitcoin +1,336.4%	10-Yr Tsy +1.0%	Bitcoin +94.2%	Bitcoin +308.5%	Bitcoin +57.2%
	10-Yr Treasury +16.2%	REITs +22.9%	U.S. Small Cap +38.8%	U.S. Large Cap +13.7%	U.S. Large Cap +1.4%	U.S. Small Cap +21.3%	EM Equities +37.3%	Global Bonds -1.2%	U.S. Large Cap +31.5%	Gold +25.1%	Commodities +40.4%
	Gold +10.1%	EM Equities +18.2%	U.S. Large Cap +32.4%	10-Yr Treasury +10.6%	REITs +1.3%	HY Corp. +17.1%	U.S. Large Cap +21.8%	Gold -1.6%	U.S. Small Cap +25.5%	U.S. Small Cap +20.0%	REITs +33.1%
	Corp. Bonds +8.2%	U.S. Small Cap +16.4%	HY Corp. +7.4%	Corp. Bonds +7.5%	10-Yr Treasury +1.1%	U.S. Large Cap +12.0%	U.S. Small Cap +14.7%	HY Corp. -2.1%	REITs +24.6%	U.S. Large Cap +18.4%	U.S. Large Cap +28.7%
	Global Bonds +5.6%	U.S. Large Cap +16.0%	REITs +2.7%	U.S. Small Cap +4.9%	Corp. Bonds -0.7%	Commodities +11.4%	Gold +13.5%	Corp. Bonds -2.5%	EM Equities +18.4%	EM Equities +18.3%	U.S. Small Cap +14.8%
	HY Corp. +5.0%	HY Corp. +15.8%	Commodities -1.2%	HY Corp. +2.5%	Global Bonds -3.2%	EM Equities +11.2%	REITs +7.7%	U.S. Large Cap -4.4%	Gold +18.3%	10-Yr Treasury +10.0%	HY Corp. +5.3%
	REITs +2.5%	Corp. Bonds +9.8%	Corp. Bonds -1.5%	Global Bonds +0.6%	U.S. Small Cap -4.4%	Gold +8.1%	HY Corp. +7.5%	REITs -4.5%	Commodities +17.6%	Corp. Bonds +9.9%	Corp. Bonds -1.0%
	U.S. Large Cap +2.1%	Gold +7.1%	Global Bonds -2.6%	Gold -1.4%	HY Corp. -4.5%	REITs +6.4%	Global Bonds +7.4%	U.S. Small Cap -11.0%	Corp. Bonds +14.5%	Global Bonds +9.2%	EM Equities -2.5%
	Commodities -1.2%	Global Bonds +4.3%	EM Equities -2.6%	EM Equities -2.2%	Gold -10.4%	Corp. Bonds +6.1%	Corp. Bonds +6.4%	Commodities -13.8%	HY Corp. +14.3%	HY Corp. +7.1%	10-Yr Treasury -3.3%
	U.S. Small Cap -4.2%	10-Yr Treasury +2.7%	10-Yr Treasury -8.6%	Commodities -33.1%	EM Equities -14.9%	Global Bonds +2.1%	Commodities +5.8%	EM Equities -14.6%	10-Yr Treasury +8.0%	REITs -10.1%	Gold -3.6%
Bottom Performers	EM Equities -18.4%	Commodities +0.1%	Gold -28.3%	Bitcoin -56.1%	Commodities -32.9%	10-Yr Treasury +1.0%	10-Yr Treasury +2.4%	Bitcoin -73.5%	Global Bonds +6.8%	Commodities -23.7%	Global Bonds -4.7%

<b>Performance</b>	<b>1MO</b>	<b>3MO</b>	<b>YTD</b>	<b>1YR</b>	<b>3YR*</b>	<b>5YR*</b>
Bitcoin	-20.19%	5.37%	57.16%	57.16%	131.87%	116.41%
Gold	3.08%	4.11%	-3.64%	-3.64%	12.56%	9.77%
S&P 500	4.48%	11.03%	28.71%	28.71%	26.07%	18.47%
Barclays Agg	-0.26%	0.01%	-1.54%	-1.54%	4.79%	3.57%

\*Returns greater than 1 year are annualized.

	<b>5YR Standard Deviation</b>	<b>5YR Sharpe Ratio</b>	<b>5YR Correlation to BTC</b>
Bitcoin	91.3%	1.27	-
Gold	12.7%	0.72	0.11
S&P 500	15.4%	1.12	0.25
Barclays Agg	3.1%	0.81	0.16

## Sources:

NYDIG, Bloomberg as of 12/31/21, unless noted otherwise. All prices are 4:00 pm ET prices on the last business day of each month. Barclays Agg represents the Bloomberg Barclays US Aggregate Total Return Bond Index. Bitcoin returns based on month-end 4pm prices. Monthly bitcoin prices prior to October 2018 are based on Coinbase 4pm pricing. In October 2018, NYDIG began generating bitcoin prices in accordance with NYDIG Asset Management's valuation policy for its bitcoin funds. The monthly bitcoin prices used after October 2018 reflect 4pm prices determined in accordance with such valuation policy, which is the same valuation policy that is used for NYDIG's funds. As there are two different pricing sources for bitcoin reflected, the historical performance of bitcoin shown may be different if the bitcoin prices in accordance with NYDIG Asset Management's valuation policy were used for the entire period or if the Coinbase pricing were used for the entire period. Performance data quoted represents past performance of bitcoin. Past performance of bitcoin is not indicative of future results. Bitcoin has historically exhibited high price volatility relative to more traditional asset classes. The value of an investment in bitcoin or the funds could decline rapidly, including to zero.

Returns for the Callan Chart sourced from NYDIG, Bloomberg, Portfolio Visualizer as of 12/31/21. U.S. Large Cap is represented by the S&P 500 Total Return Index. U.S. Small Cap is represented by the Russell 2000 Total Return Index. EM Equities are represented by the MSCI Emerging Markets Net Total Return USD Index. Corporate Bonds (Corp. Bonds) are represented by the Bloomberg U.S. Corporate Total Return Unhedged Index. High Yield Corporate Bonds (HY Corp.) are represented by the Bloomberg U.S. Corporate High Yield Total Return Index. Global Bonds are represented by the Bloomberg Global Aggregate Total Return Unhedged USD Index. Commodities are represented by the S&P GSCI Total Return Index. REITs are represented by the FTSE EPRA NAREIT Developed REIT Total Return Index.

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