

December 1, 2023

Company Name	Ticker Symbol	Price		Enterprise Value (\$M)	Valuation Multiples		Exp. Rev Growth Rate 2022 - 2023E	Price Change					
		Current Price	% Within 52 Week Range		EV / LTM Revenue	EV / 2023E Revenue		1 Week	1 Month	Jan 2, 2023	Since Coinbase Direct Listing	Since Inception	
<b>Architect Crypto Public Company Index (c)</b>													
	Price	\$31.36						\$28.21	\$21.27	\$11.78	\$100.00		
	% Change							11.2%	47.4%	166.1%	-68.6%		
<b>Traditional Indices</b>													
	S&P 500	\$4,592						1%	8%	20%			
	NASDAQ	14,291						0%	9%	38%			
	Dow Jones	36,225						2%	9%	9%			
<b>Marquee Crypto Assets</b>													
	Bitcoin	BTC	\$38,841.00	100%	\$757,737	--	--	--	3%	12%	134%	-38%	--
	Ethereum	ETH	2,086.00	97%	250,940	--	--	--	-1%	14%	27%	-14%	--
	DeFi Index (a)	DPI	90.32	56%	50	--	--	--	-2%	22%	57%	-82%	--
<b>Crypto Investment Platforms</b>													
	Coinbase	COIN	\$132.94	99%	\$29,421	10.6	10.3	15%	15%	71%	296%	-60%	-60%
	Galaxy Digital (b)	GLXY	6.55	62%	2,287	9.3	6.9	9%	9%	28%	122%	-82%	601%
	Bakkt	BKKT	1.87	55%	469	1.4	0.1	6807%	-1%	99%	61%	-86%	-81%
	Coinshares (b)	CNSRF	3.64	61%	262	4.3	2.6	-6%	-6%	-21%	1%	-69%	-65%
	Bitcoin Depot	BTM	2.24	61%	139	0.2	0.2	-2%	-2%	-10%	--	--	-40%
<b>Bitcoin Network Operators</b>													
	Marathon	MARA	\$13.55	62%	\$3,419	29.2	9.0	222%	19%	52%	299%	-68%	-74%
	Riot	RIOT	13.70	60%	2,592	10.3	7.9	27%	14%	34%	307%	-73%	407%
	Core Scientific	CORZQ	0.38	29%	1,097	0.3	0.6	10%	-17%	-46%	443%	--%	-96%
	Cipher Mining	CIFR	2.97	53%	745	95.5	5.7	1579%	10%	-15%	364%	-71%	-70%
	Northern Data	NB2	26.43	71%	722	--	2.6	-45%	4%	-15%	367%	-78%	41%
	Bitfarms	BITF	1.66	72%	592	11.3	--	-12%	55%	51%	286%	-62%	76%
	Bitdeer	BTDR	4.97	18%	410	1.2	--	--	15%	-16%	-42%	--%	-42%
	TeraWulf	WULF	1.33	23%	394	8.8	--	--	6%	21%	87%	-86%	-87%
	Hut 8	HUT	2.25	39%	294	1.9	1.9	-45%	17%	2%	174%	-66%	-14%
	Hive	HIVE	3.45	38%	279	2.0	2.0	-25%	17%	5%	125%	-80%	145%
	Canaan	CAN	1.57	5%	189	--	2.6	-49%	-9%	-13%	-19%	-88%	-83%
	Argo	ARBK	1.23	31%	127	1.4	1.8	29%	4%	3%	6%	--%	-22%
<b>Crypto Influenced</b>													
	PayPal	PYPL	\$59.58	24%	\$65,046	2.4	2.2	8%	7%	15%	-20%	-78%	
	Block	SQ	64.94	51%	39,059	2.2	2.0	14%	9%	59%	0%	-75%	405%
	Microstrategy	MSTR	528.39	98%	9,812	19.7	19.3	2%	2%	24%	264%	-28%	406%
	Robinhood	HOOD	9.38	32%	2,400	1.8	1.3	38%	13%	3%	16%	--%	-75%

(a) DeFi Pulse Index (includes top 14 DeFi tokens)  
 (b) Due to disproportionate cash balances, we are displaying market cap as a substitute for enterprise value  
 (c) Architect Crypto Public Company Index is a price weighted average across the three sector subsectors in the crypto public companies snapshot. A discount to Microstrategy's share price of 85% has been added to dilute effect on index. There is a 45% weight to Crypto Investment Platforms, 45% to Bitcoin Network Operators, and 10% to Crypto Influenced groups.

## PERSPECTIVES by Glenn Gottlieb

### News on Macro Economic Data

There was some mixed news regarding the economy this past week:

On the positive side, the core personal consumption expenditures index (PCE), the Fed's favored metric for inflation (excluding gas and food), rose 0.2% and 3.5% for the year, which was in line with expectations. Consumer spending came in at a 0.2% increase in October. Taking inflation into account, consumer spending was flat for the month. Additionally, a couple of usually hawkish Fed governors seemed to soften their stance regarding additional rate hikes.

On the flip side, the manufacturing sector contracted for the 13<sup>th</sup> straight month, with a PMI of 46.7, and new orders remained in contraction, backorders are lower by 2.9%, and multiple analysts point to the coming slowdown in the economy. While the slowdown would support the Fed's objective, and assist with reducing inflation, it's important to point out that M2 (money supply) has increased by 40% over the last two years, and to date, has only contracted 4%. Excessive money supply and excessive government spending may contribute to continued higher-than-wanted inflation, thus supporting the Fed's "higher for longer" mantra.

### Crypto Public Company Activity

MicroStrategy is a business intelligence firm that also owns about 0.90% of the total circulating supply of Bitcoin. Their current announced purchase of 16,130 BTC at \$593M brings the company's total holdings to 174,530 BTC at an average price of \$30,252 per BTC, representing an unrealized gain of about \$1.35B.

MicroStrategy began accumulating BTC in August 2020 as a hedge against inflation and to protect its cash reserves. MicroStrategy also took the path of not only converting cash to BTC, but also raising debt to fund additional BTC purchases. While the strategy was questioned at the time, there is no doubt that it has proven very profitable.

Far more interesting is an analysis of the performance of MicroStrategy in relation to the performance of its stock price. MicroStrategy stock has been a top performer over the last three years, and has grown to an \$8B market cap. Yet the financial performance of MicroStrategy's core business has struggled with profitability over the last few years, and has fluctuated between marginal revenue growth and negative revenue growth. Since initiating BTC purchases, enterprise value to revenue has grown from 1.4x in August 2020 to 19.1x today. In comparison, the software industry average EV / Rev is roughly 2.6x, and the hottest public tech company in the universe, Nvidia, has an EV/Rev of 25x.

With \$6.55B in BTC holdings, and an \$8B market cap, it is reasonable to assume that the underlying MicroStrategy business, while funding BTC purchases, is almost irrelevant to the share price, and that BTC holdings are driving enterprise value. Given the announcement of the most recent purchase has driven MSTR up over 4% today, is it too much to think that with MSTR holding nearly 1% of outstanding BTC, they represent the first BTC ETF?