

# Coinbase

# 4Q23 Crypto data tracker + COIN preview

Reiterate Rating: UNDERPERFORM | PO: 79.00 USD | Price: 141.16 USD

# Crypto volumes roar back in 4Q

Our crypto data tracker series leverages crypto exchange volume data from CoinGecko, which tracks global transaction volumes across crypto exchanges including Coinbase (COIN), Binance, Kraken, and others. 4Q data points to a COIN transaction volume beat after reaching multi-year lows in 3Q. That said, we continue to see risk in shares, given crypto market unpredictability, lack of revenue diversification, and lingering regulatory/legal issues. Maintain Underperform.

# Higher volumes likely to drive txn revenue beat for COIN

Per CoinGecko, aggregate crypto transaction volumes across the aforementioned exchanges rallied significantly in 4Q, growing 86% q/q following a 28% decline in 3Q. COIN volumes rose ~98% QoQ, to ~\$150B (well above consensus of \$123B) following a 17% QoQ decline in 3Q. COIN gained a slight 70bps of market share in 4Q. Additionally, COIN should benefit from the continued impact of higher pricing (implemented early '23), partially offset by a negative mix shift as the "power user" returns with higher volumes. COIN disclosed Oct transaction revenues of \$105M, from which we can derive a take rate in October of ~34bps. That said, given the run up in the crypto market in Nov / Dec, we are estimating a full quarter take rate of 30bps, which yields our transaction revenue estimate of \$444M, above the Street at \$384M.

# BTC ETFs approved as expected; litigation risk remains

On January 10<sup>th</sup>, the SEC approved all 11 Bitcoin spot ETF applications. This development was widely expected, and the pullback in COIN shares yesterday suggested a "sell the news" dynamic. COIN will serve as custodian for many of these ETFs, though we would expect thin economics given the size of these ETF customers (ie, Blackrock), who are likely to compete heavily on fees. These ETFs could also represent a competitive threat to crypto exchanges such as COIN. Separately, oral arguments for the SEC v COIN litigation are expected to begin on 1/17.

# Revise estimates higher, PO to \$79

We now model F23/F24 net revs of \$2,801M/\$3,334M from \$2,667M/\$3,201M (Street = \$2,745M/\$3,320M (Exhibit 1). We raise Adj. EBITDA for 2023/2024 to \$925M/\$958M from \$832M/\$943M (Street = \$866M/\$1,064M). Our new ests lead us to raise our PO to \$79 (\$66 prior), based on 5.1x '24 net revs (vs. 4.3x prior due to comp group multiples).

Estimates (Dec) (US\$)	2021A	2022A	2023E	2024E	2025E
EPS	17.50	(11.81)	(0.60)	(0.26)	0.03
EPS Change (YoY)	NM	NM	94.9%	56.7%	NM
Consensus EPS (Bloomberg)			(0.73)	(0.47)	0.06
DPS	0	0	0	0	0
Valuation (Dec)					
P/E	8.1x	NM	NM	NM	4,705.3x
EV / EBITDA*	8.0x	NM	35.5x	34.3x	31.2x
Free Cash Flow Yield*	32.0%	-4.7%	3.0%	1.6%	1.7%
* For full definitions of <i>IQ</i> method <sup>SM</sup> measures, see page 8.					

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Refer to important disclosures on page 9 to 11. Analyst Certification on page 7. Price Objective Basis/Risk on page 7.

Timestamp: 12 January 2024 12:01AM EST

#### 12 January 2024

#### Equity

Previous	Current
66.00	79.00

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#### **Stock Data**

ESGMeter™	Medium
ROE (2023E)	13.9%
Bloomberg / Reuters	COIN US / COIN.OQ
BofA Ticker / Exchange	COIN / NAS
Average Daily Value	2089.43 USD
Free Float	81.5%
Mrkt Val / Shares Out (mn)	33,493 USD / 237.3
52-Week Range	40.63 USD -187.39 USD
Investment Opinion	C-3-9
Date Established	12-Jan-2024
Price Objective	79.00 USD
Price	141.16 USD

ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of BofA Global Research's equity investment rating, volatility risk rating, income rating, and price objective for that company. For full details, refer to "BofA ESGMeter Methodology".

See inside for more details on estimate changes and our newly introduced 2026 estimates.

# *iQ*profile <sup>™</sup> Coinbase

(US\$ Millions)	2021A	2022A	2023E	2024E	2025
Return on Capital Employed	45.5%	-24.0%	-2.3%	-0.1%	0.39
Return on Equity	123.4%	-9.1%	13.9%	10.3%	9.99
Operating Margin	39.2%	-84.9%	-8.3%	-0.2%	1.89
Free Cash Flow	10,727	(1,588)	997	537	58.
<i>iQ</i> method <sup>™</sup> – <b>Quality of Earnings*</b>					
(US\$ Millions)	2021A	2022A	2023E	2024E	2025
Cash Realization Ratio	2.4x	NM	1.2x	0.8x	0.8
Asset Replacement Ratio	0x	0x	0x	0x	0.
Tax Rate	NM	14.3%	13.2%	NM	68.59
Net Debt-to-Equity Ratio	-104.9%	-78.3%	-60.9%	-45.9%	-53.89
Interest Cover	NA	NA	NA	NA	N/
Income Statement Data (Dec)					
(US\$ Millions)	2021A	2022A	2023E	2024E	2025
Sales	7.839	3,194	2,985	3.544	3,90
% Change	513.7%	-59.3%	-6.6%	18.8%	10.19
Gross Profit	7,839	3,194	2,985	3,544	3,90
% Change	513.7%	-59.3%	-6.6%	18.8%	10.19
EBITDA	4,090	(371)	924	958	1,05
% Change	675.6%	NM	NM	3.6%	9.9%
Net Interest & Other Income	50	354	(88)	40	4(
Net Income (Adjusted)	4,533	(536)	806	685	765
% Change	NM	NM	NM	-15.0%	11.7%
(US\$ Millions)	2021A	2022A	2023E	2024E	2025
Net Income from Cont Operations (GAAP)	3,097	(2,625)	(139)	(63)	10
Depreciation & Amortization	64	154	143	135	143
Change in Working Capital	6,833	(1,031)	365	(259)	(298
Deferred Taxation Charge	NA 726	NA 1 017	NA 630	NA 722	N/
Other Adjustments, Net	736	1,917	629	723	73
Capital Expenditure	(3)	(3)	(1)	(1)	(1
Free Cash Flow	10,727	-1,588	997 NM	537 -46.2%	
% Change	258.3%				585
		NM			585 9.1%
Share / Issue Repurchase	237	51	28	0	585 9.1%
Cost of Dividends Paid	237 0	51 0	28 0	0 0	585 9.1%
	237	51	28	0	<b>585</b> <b>9.1%</b> (
Cost of Dividends Paid Change in Debt Balance Sheet Data (Dec)	237 0 0	51 0 0	28 0 0	0 0 0	585 9.1% (
Cost of Dividends Paid Change in Debt  Balance Sheet Data (Dec) (US\$ Millions)	237 0 0	51 0 0	28 0 0	0 0 0	585 9.1% ( (
Cost of Dividends Paid Change in Debt  Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents	237 0 0 2021A 7,123	51 0 0 2022A 4,425	28 0 0 2023E 3,886	0 0 0 2024E 3,490	585 9.1% ( ( ) 2025 4,64
Cost of Dividends Paid Change in Debt  Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables	237 0 0 2021A 7,123 396	51 0 0 <b>2022A</b> 4,425 404	28 0 0 0 <b>2023E</b> 3,886 472	0 0 0 <b>2024E</b> 3,490 561	585 9.1% ( ( 2025 4,64 618
Cost of Dividends Paid Change in Debt  Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets	237 0 0 2021A 7,123 396 10,854	51 0 0 <b>2022A</b> 4,425 404 6,206	28 0 0 2023E 3,886 472 5,864	0 0 0 <b>2024E</b> 3,490 561 7,785	585 9.1% ( ( 2025 4,64 618 7,988
Cost of Dividends Paid Change in Debt  Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment	237 0 0 2021A 7,123 396 10,854 59	51 0 0 <b>2022A</b> 4,425 404 6,206 172	28 0 0 2023E 3,886 472 5,864 202	0 0 0 <b>2024E</b> 3,490 561 7,785 202	588 9.1% ( ( ( 2025 4,64 618 7,989 202
Cost of Dividends Paid Change in Debt  Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets	237 0 0 2021A 7,123 396 10,854 59 2,841	51 0 0 <b>2022A</b> 4,425 404 6,206 172 3,105	28 0 0 2023E 3,886 472 5,864 202 3,310	0 0 0 <b>2024E</b> 3,490 561 7,785 202 3,611	588 9.1% ( ( ( 2025 4,64 618 7,989 207 3,804
Cost of Dividends Paid Change in Debt  Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets	237 0 0 2021A 7,123 396 10,854 59 2,841 21,274	51 0 0 <b>2022A</b> 4,425 404 6,206 172 3,105 <b>14,312</b>	28 0 0 2023E 3,886 472 5,864 202 3,310 13,735	0 0 0 2024E 3,490 561 7,785 202 3,611 15,649	588 9.1% ( ( ( 2025 4,64 618 7,988 203 3,804
Cost of Dividends Paid Change in Debt  Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt	237 0 0 2021A 7,123 396 10,854 59 2,841 21,274 427	51 0 0 <b>2022A</b> 4,425 404 6,206 172 3,105 <b>14,312</b>	28 0 0 0 2023E 3,886 472 5,864 202 3,310 13,735	0 0 0 0 <b>2024E</b> 3,490 561 7,785 202 3,611 <b>15,649</b>	2025 4,64 61; 7,98; 20; 3,80 17,250
Cost of Dividends Paid Change in Debt  Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt Other Current Liabilities	237 0 0 2021A 7,123 396 10,854 59 2,841 21,274 427 10,992	51 0 0 <b>2022A</b> 4,425 404 6,206 172 3,105 <b>14,312</b> 152 5,251	28 0 0 2023E 3,886 472 5,864 202 3,310 13,735 160 4,364	0 0 0 0 <b>2024E</b> 3,490 561 7,785 202 3,611 <b>15,649</b> 190 5,182	2025 4,64 61; 7,98; 20; 3,80 17,25 20; 5,70
Cost of Dividends Paid Change in Debt  Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt Other Current Liabilities Long-Term Debt	237 0 0 2021A 7,123 396 10,854 59 2,841 21,274 427 10,992 0	51 0 0 <b>2022A</b> 4,425 404 6,206 172 3,105 <b>14,312</b> 152 5,251 0	28 0 0 2023E 3,886 472 5,864 202 3,310 13,735 160 4,364 0	0 0 0 0 <b>2024E</b> 3,490 561 7,785 202 3,611 <b>15,649</b> 190 5,182 0	588 9.1% ( ( ( 2025 4,64 618 7,989 200 3,804 17,250 5,700
Cost of Dividends Paid Change in Debt  Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt Other Current Liabilities Long-Term Debt Other Non-Current Liabilities	237 0 0 2021A 7,123 396 10,854 59 2,841 21,274 427 10,992 0 3,474	51 0 0 <b>2022A</b> 4,425 404 6,206 172 3,105 <b>14,312</b> 152 5,251 0 3,455	28 0 0 0 2023E 3,886 472 5,864 202 3,310 13,735 160 4,364 0 3,090	0 0 0 0 2024E 3,490 561 7,785 202 3,611 15,649 190 5,182 0 3,091	2025 4,64 618 7,989 207 3,804 17,250 5,707 (
Cost of Dividends Paid Change in Debt  Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt Other Current Liabilities Long-Term Debt Other Non-Current Liabilities Total Liabilities	237 0 0 2021A 7,123 396 10,854 59 2,841 21,274 427 10,992 0 3,474 14,893	51 0 0 2022A 4,425 404 6,206 172 3,105 14,312 152 5,251 0 3,455 8,857	28 0 0 0 2023E 3,886 472 5,864 202 3,310 13,735 160 4,364 0 3,090 7,613	0 0 0 0 2024E 3,490 561 7,785 202 3,611 15,649 190 5,182 0 3,091 8,463	2025 4,64 618 7,985 202 3,804 17,250 5,707 ( 3,092 9,009
Cost of Dividends Paid Change in Debt  Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt Other Current Liabilities Long-Term Debt Other Non-Current Liabilities	237 0 0 2021A 7,123 396 10,854 59 2,841 21,274 427 10,992 0 3,474	51 0 0 <b>2022A</b> 4,425 404 6,206 172 3,105 <b>14,312</b> 152 5,251 0 3,455	28 0 0 0 2023E 3,886 472 5,864 202 3,310 13,735 160 4,364 0 3,090	0 0 0 0 2024E 3,490 561 7,785 202 3,611 15,649 190 5,182 0 3,091	2025 4,64 618 7,988 202 3,804 17,250 5,707 (3,092 9,009 8,242

## **Company Sector**

Financial Services-Consumer/Commercial

#### **Company Description**

Coinbase (COIN) is a leading global crypto provider of end-to-end financial infrastructure and technology. The company has 4,510 employees as of December 2022 and provides a wide range of crypto-native products, services, technology and infrastructure to over 110M verified users, 9,000+ institutions, and 160,000+ ecosystem partners in over 100 countries. During 2022, COIN processed over \$830B in trading volume and generated \$3.19B in total revenue

#### **Investment Rationale**

We believe COIN's technology/innovation and brand are positive differentiators as more consumers and institutions engage in the crypto/digital asset ecosystem. That said, recent events in the crypto ecosystem have likely damaged user trust and caught the eye of regulators, which we expect to be meaningful headwinds in the near/medium term.

#### Stock Data

Average Daily Volume 14,801,846

## **Quarterly Earnings Estimates**

	2022	2023
Q1	-1.98A	-0.34A
Q2	-4.95A	-0.42A
Q3	-2.43A	-0.01A
Ω4	-2 46A	0.17F

\* For full definitions of *IQ*method <sup>SM</sup> measures, see page 8.

# Positive 4Q signals but outlook still murky; reiterate Underperform

Despite the 4Q upturn in the broader crypto market, the asset class remains highly volatile. While widely anticipated BTC spot ETF approval (which became official after the close on 1/10/24) lends greater legitimacy to the crypto space, these ETFs could also represent a form of competition to traditional crypto exchanges such as COIN. We also believe regulatory uncertainty will persist in the midst of the SEC's lawsuit against COIN.

# 4Q: Expecting a top line beat

Our analysis of CoinGecko data points to a top-line beat for COIN in 4Q, driven by a rebound in transaction volumes. In addition to volumes returning to healthier levels, COIN should still benefit from elevated USDC interest income as rates remained high. We see 4Q net revenues of \$779M, above current Street ests of \$727M. We are modeling Adj EBITDA of \$266M vs. the Street at \$217M.

#### Transaction revs - data points to beat as transaction volumes recover

Transaction revenues historically have been the primary driver of the top line (75% of net revenues in 2022). After a difficult few quarters in which volumes reached historic lows, transaction volumes showed signs of meaningful recovery in 4Q. Across the exchanges we track, volumes were up 86% QoQ, though still down 15% on a YoY basis.

In addition to volumes rebounding, in light of the FTX collapse, COIN was able to raise retail pricing and roll back promotional pricing for Institutional clients at the beginning of 2023, which increased take rates. This led to a ~73% bump in the blended take-rate from 4Q22 through 3Q23. That said, with pricing already raised, we think it is unlikely to move materially higher from current levels.

In their 3Q investor letter, COIN disclosed transaction revenues of  $\sim$ \$105M in October. CoinGecko data shows  $\sim$ \$31B of transaction volumes, implying an October take rate of 34bps. Full quarter consensus transaction revenue of \$384M implies a 23bp take rate for November/December based on the volume data derived from CoinGecko, a level not seen since 4Q22 before the pricing changes had taken effect.

Based on 4Q volumes and post 1H23 pricing changes, we estimate the full quarter 4Q take rate to be ~30bps (28bps for November/December). This is below estimated October levels as we presume higher crypto prices and volatility in November/December drove more involvement of "power users" who trade more and therefore pay lower take rates.

#### S&S revs - in line with guide given Fed pause, stable USDC market cap

COIN guided for 4Q S&S revenues of "approximately flat compared to Q3" (which was \$335M). Current Street estimates are for \$343M and BofAe is \$335M. Given that USDC's market cap has remained stable at ~\$25B over the duration of the quarter and rates have stayed flat, we aren't expecting significant deviation from the guide.

#### **Adj EBITDA**

Adjusted EBITDA continues to meaningfully improve vs. \$(371M) in 2022 given cost discipline. In their 3Q shareholder letter, COIN guided for meaningful positive Adjusted EBITDA in 2023, an incrementally more positive guide than prior of Adj EBITDA to improve in absolute dollar terms vs F22.

Given strong performance in the first three quarters of the year (Adj EBITDA of \$284M, \$194M, \$181M in Q1, Q2, Q3, respectively) and our new revenue estimates, we raise our 4Q Adj EBITDA estimate to \$266M from \$174M prior, implying full year 2023 Adj EBITDA of \$925M (\$832M prior), while the Street is at \$217M/\$866M for 4Q/FY2023.



# Looking ahead...where does incremental revenue growth come from?

Looking ahead to 2024, COIN's revenue story will continue to be dictated by trading volumes, which in turn will be dictated by the price and volatility of crypto assets such as BTC. These dynamics remain inherently nearly impossible to forecast.

COIN has been selected to provide custodial services for numerous new BTF spot ETFs that were just approved. However, many of these ETF issuers have recently amended their filings to reflect lower fees in an attempt to gain early market share. Multiple issuers are even offering zero fees for an introductory period. As a result, we would expect COIN's custodial spreads to be quite thin, especially when considering the massive size of these BTC ETF issuers (ie, Blackrock, Fidelity). These ETFs could also represent a form of competition for traditional crypto exchanges such as COIN.

## Litigation risks persist

The pending litigation with the SEC as well as a broader ongoing lack of regulatory clarity remains an overhang for COIN, in our view. In June, the SEC filed a lawsuit against COIN (SEC locks in on crypto, COIN under fire), alleging COIN acts as an unregistered broker, exchange, and clearing agency.

While the 7/13/23 decision in the separate SEC v Ripple case (that Ripple's XRP token is not a security) was viewed positively by COIN investors (as was the 10/3/23 ruling that the SEC cannot appeal that decision), it is unclear whether the various tokens listed on Coinbase will receive the same favorable treatment by the courts as Ripple's XRP token. The SEC v COIN case is scheduled to begin oral arguments on January  $17^{\text{th}}$ , though a ruling isn't expected until a later date, and we will be listening for updates on case progression on the 4Q earnings call.

# Raising estimates for COIN

In Exhibit 1, we show our updated estimates for 4Q/FY23/FY24/FY25 for transaction volumes, transaction revenues, S&S revenues, net revenue, and Adjusted EBITDA.

We are increasing our transaction volume estimates by 16%/26% for F23/F24 given the 4Q23 rebound in volumes. Positive signals from the market seem to suggest the worst of the crypto winter is over and volumes should return to more normalized levels.

As a result of the higher volumes, our transaction revenue estimates for 2023/2024 move 10%/8% higher. The increase in transaction volumes is partially offset by our assumption that transaction take rates will need to come in a bit as more "power users" generates lower fees (F24 blended take rate of 32bps vs. 37bps prior).

#### Exhibit 2: BofA/Street 4Q23, FY23, FY24, FY2025, FY2026 estimates

Raise our estimates due to strong 4Q data, introducing 2026 estimates

		4Q23			FY2023			FY2024			FY2025		FY2026
	BofA new	BofA old	Street	BofA new	BofA old	Street	BofA new	BofA old	Street	BofA new	BofA old	Street	BofA New
Volume	\$150B	\$87B	\$123B	\$463B	\$400B	\$436B	\$575B	\$457B	\$619B	\$606B	\$534B	\$680B	\$636B
Transaction revenue	\$444M	\$310M	\$384M	\$1,435M	\$1,300M	\$1,372M	\$1,834M	\$1,701M	\$1,855M	\$2,121M	\$1,869M	\$1,847M	\$2,286M
S&S revenue	\$335M	\$335M	\$343M	\$1,367M	\$1,367M	\$1,375M	\$1,499M	\$1,499M	\$1,464M	\$1,574M	\$1,574M	\$1,544M	\$1,653M
Net revenue	\$779M	\$645M	\$727M	\$2,801M	\$2,667M	\$2,745M	\$3,334M	\$3,201M	\$3,320M	\$3,695M	\$3,444M	\$3,391M	\$3,938M
Adj EBITDA	\$266M	\$174M	\$217M	\$925M	\$832M	\$866M	\$958M	\$943M	\$1,064M	\$1.052M	\$1,040M	\$1,010M	\$1,121M

Source: BofA Global Research estimates, Visible Alpha

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# CoinGecko transaction volume data

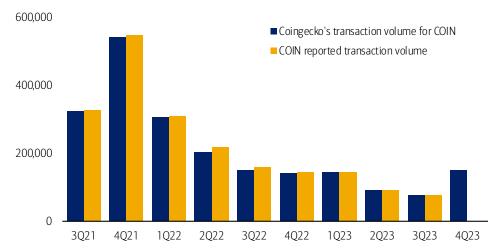
We analyzed historic correlation between COIN's reported quarterly volumes and publicly available exchange volume data from CoinGecko. We found that over the last 8 quarters, CoinGecko's data on total exchange volume has trended very closely with COIN's quarterly reported numbers (Exhibit 2), with an R-squared of 0.9993.

In 4Q, CoinGecko estimates COIN had trading volume of ~\$150B, a 98% increase QoQ and a 4% increase YoY. Street transaction volume estimates are currently at \$123B.

CoinGecko estimates that in October, COIN generated  $\sim$ \$31B of transaction volume; in their 3Q investor letter, COIN disclosed October transaction revenue of \$105M; this implies a  $\sim$ 0.34% take-rate, notably below the 3Q take rate of 0.38%, which tracks with the inverse relationship we have historically seen between volumes and take rates. We are now modeling a 0.30% take-rate for 4Q given the further surge in volumes in the latter part of the quarter. We use the 30bps take rate and the CoinGecko total 4Q volume est of  $\sim$ \$150B to derive our updated 4Q transaction revenue estimate of \$444M (vs. \$310M prior; Street is at \$384M).

# Exhibit 2: Coinbase quarterly transaction volume (\$M)

CoinGecko data vs COIN's reported data



**Source:** CoinGecko, Company reports

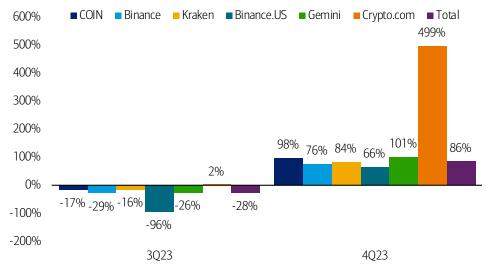
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Exhibit 3 shows the QoQ change in volume among the exchanges we track. COIN's 98% jump was greater than several of the peers we track, who rose 86% on average, suggesting COIN may have taken more market share in 4Q. All exchanges we track did better QoQ, though there was wide dispersion among the various exchanges. Binance.US volumes was up the least among peers at +66% while Crypto.com's volumes surged nearly 500% QoQ.

## Exhibit 3: QoQ change in global crypto volumes

 $4Q\,volumes$  were up 86% across exchanges we track w/ COIN's volumes up 98% and Crypto.com's up  $\sim\!500\%$ 



**Source:** CoinGecko, Company Reports, BofA Global Research

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# Price objective basis & risk

#### Coinbase (COIN)

We calculate our price objective of \$79 based on a 5.1x multiple to our 2024E revenues. The multiple represents an approximately 20% discount to COIN's comp group (due to elevated crypto risk/volatility and regulatory uncertainty), which includes a mix of exchanges, brokers, crypto-centric platforms, and high-growth consumer-facing Fintech platforms.

Upside risks to our price objective are 1) rising cryptocurrency prices, 2) market share gains as current crypto headwinds causes industry consolidation, and 3) regulatory clarity

Downside risks are 1) lower volatility and pricing for cryptocurrencies, 2) intensifying competitive landscape that could accelerate pressure on pricing/take rates, 3) increasing global crypto regulation, and 4) cyber-attacks.

# **Analyst Certification**

I, Jason Kupferberg, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

US - Payments, Processors, Specialty Finance and IT services Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Accenture Plc	ACN	ACN US	Jason Kupferberg
	American Express Company	AXP	AXP US	Mihir Bhatia
	Block Inc	SQ	SQ US	Jason Kupferberg
	Capital One Financial	COF	COF US	Mihir Bhatia
	Discover Financial	DFS	DFS US	Mihir Bhatia
	Enact Holdings	ACT	ACT US	Mihir Bhatia
	Essent Group	ESNT	ESNT US	Mihir Bhatia
	Fidelity National Information Services	FIS	FIS US	Jason Kupferberg
	Fiserv Inc	FI	FIUS	Jason Kupferberg
	FleetCor Technologies Inc.	FLT	FLT US	Mihir Bhatia
	Flywire	FLYW	FLYW US	Jason Kupferberg
	Global Payments Inc	GPN	GPN US	Jason Kupferberg
	Jack Henry & Associates	JKHY	JKHY US	Jason Kupferberg
	Mastercard Inc	MA	MA US	Jason Kupferberg
	MGIC Investment Corp.	MTG	MTG US	Mihir Bhatia
	NMI Holdings	NMIH	NMIH US	Mihir Bhatia
	Nuvei	NVEI	NVEI US	Jason Kupferberg
	Nuvei	YNVEI	NVEI CN	Jason Kupferberg
	OneMain Holdings, Inc.	OMF	OMF US	Mihir Bhatia
	Shift4 Payments, Inc	FOUR	FOURUS	Jason Kupferberg
	Telus International	TIXT	TIXT US	Cassie Chan
	Telus International	YTIXT	TIXT CN	Cassie Chan
	Visa Inc.	V	V US	Jason Kupferberg
	WEX Inc.	WEX	WEX US	Mihir Bhatia
NEUTRAL				
	Affirm Holdings	AFRM	AFRM US	Jason Kupferberg
	Bread Financial Holdings Inc	BFH	BFH US	Mihir Bhatia
	DLocal	DLO	DLO US	Jason Kupferberg
	Globant SA	GLOB	GLOB US	Jason Kupferberg
	Marqeta	MQ	MQ US	Jason Kupferberg
	PayPal Holdings Inc	PYPL	PYPL US	Jason Kupferberg
	SoFi Technologies Inc	SOFI	SOFIUS	Mihir Bhatia
	Synchrony Financial	SYF	SYF US	Mihir Bhatia
	Thoughtworks	TWKS	TWKS US	Jason Kupferberg
	Toast	TOST	TOST US	Jason Kupferberg



#### US - Payments, Processors, Specialty Finance and IT services Coverage Cluster

Investment rating	Company	Bof A Ticker	Bloomberg symbol	Analyst
	TTEC Holdings	TTEC	TTEC US	Cassie Chan
UNDERPERFORM				
	ADP	ADP	ADP US	Jason Kupferberg
	CGI Inc.	GIB	GIB US	Jason Kupferberg
	CGI Inc.	YGIBA	GIB/A CN	Jason Kupferberg
	Cognizant Technology Solutions	CTSH	CTSH US	Jason Kupferberg
	Coinbase	COIN	COIN US	Jason Kupferberg
	DXC Technology	DXC	DXC US	Jason Kupferberg
	EPAM Systems	EPAM	EPAM US	Jason Kupferberg
	Paychex	PAYX	PAYX US	Jason Kupferberg
	Radian Group Inc	RDN	RDN US	Mihir Bhatia
	Rocket Companies, Inc.	RKT	RKT US	Mihir Bhatia
	TaskUs	TASK	TASK US	Cassie Chan
	Western Union	WU	WU US	Jason Kupferberg
RSTR				
	EngageSmart	ESMT	ESMT US	Jason Kupferberg

# **Q**method <sup>™</sup> Measures Definitions

<b>Business Performance</b>	Numerator	Denominator
Return On Capital Employed	NOPAT = (EBIT + Interest Income) $\times$ (1 - Tax Rate) + Goodwill Amortization	Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill
		Amortization
Return On Equity	Net Income	Shareholders' Equity
Operating Margin	Operating Profit	Sales
Earnings Growth	Expected 5 Year CAGR From Latest Actual	N/A
Free Cash Flow	Cash Flow From Operations – Total Capex	N/A
Quality of Earnings	Numerator	Denominator
Cash Realization Ratio	Cash Flow From Operations	Net Income
Asset Replacement Ratio	Capex	Depreciation
Tax Rate	Tax Charge	Pre-Tax Income
Net Debt-To-Equity Ratio	Net Debt = Total Debt - Cash & Equivalents	Total Equity
Interest Cover	EBIT	Interest Expense
Valuation Toolkit	Numerator	Denominator
Price / Earnings Ratio	Current Share Price	Diluted Earnings Per Share (Basis As Specified)
Price / Book Value	Current Share Price	Shareholders' Equity / Current Basic Shares
Dividend Yield	Annualised Declared Cash Dividend	Current Share Price
Free Cash Flow Yield	Cash Flow From Operations – Total Capex	Market Cap = Current Share Price × Current Basic Shares
Enterprise Value / Sales	EV = Current Share Price × Current Shares + Minority Equity + Net Debt +	Sales
	Other LT Liabilities	
EV/EBITDA	Enterprise Value	Basic EBIT + Depreciation + Amortization

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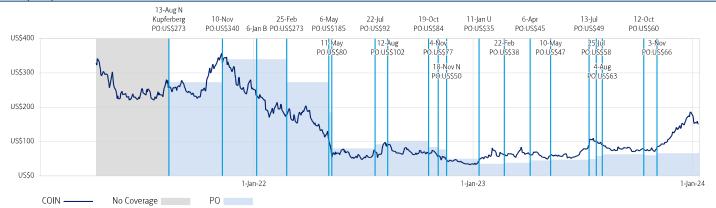
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# **Important Disclosures**

#### Coinbase (COIN) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

#### Equity Investment Rating Distribution: Financial Services Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	156	53.79%	Buy	94	60.26%
Hold	72	24.83%	Hold	48	66.67%
Sell	62	21 38%	Sell	35	56 45%

#### Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

RI Issuers that were investment banking dients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster <sup>R2</sup>
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

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