Can You Make Coin Investing in Coinbase?

Coinbase's (COIN) expected valuation has soared from ~$8 billion in late 2018 to ~$100 billion currently. While no official date has been provided, Coinbase is expected to go public via direct listing in early March 2021. With a rapidly rising valuation, driven by rising interest in cryptocurrency, we do not think investors should expect to make any money in this stock.

At the rumored valuation of ~$100 billion, the stock will earn our Neutral rating. Coinbase achieved profitability in 2020, which is encouraging, but the expected valuation implies the company will become the largest exchange in the world by revenue. It's hard to make a straight-faced argument that the firm can justify the lofty expectations baked into its valuation given:

- Competition is increasing in the cryptocurrency trading market.
- Neither its current market share or margins are sustainable in a mature cryptocurrency trading market.

The lack of traditional IPO process makes it difficult to predict where shares will open, especially as Coinbase shares have traded from $28/share to $373/share in private markets since early 2020. Nevertheless, a valuation at the rumored levels is far too high, and investors should not buy this stock at anywhere close to the rumored levels.

This report aims to help investors sort through Coinbase's financial filings to understand the fundamentals, using more reliable fundamental data, and valuation of this upcoming direct listing.

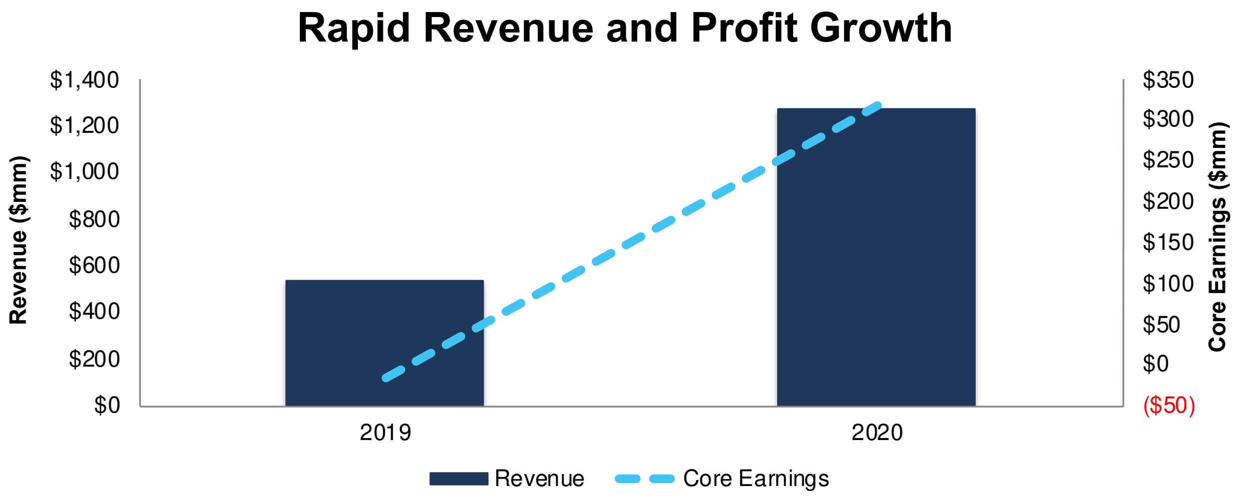
Revenue Growth Leads to Profits (For Now)

Coinbase stands out against recent IPOs due to the fact it actually generates a profit. According to Bloomberg, 85% of the companies that went public last year (excluding special purchase acquisition companies and REITs) were unprofitable. Coinbase on the other hand grew revenue by 139% year-over-year in 2020, and Core Earnings[1] improved from -$17 million to $317 million over the same time.

The firm's Core Earnings margin improved from -3% in 2019 to 25% in 2020 while its return on invested capital (ROIC) improved from -3% to 48% over the same time.

[1] Only Core Earnings enable investors to overcome the inaccuracies, omissions and biases in legacy fundamental data and research, as proven in Core Earnings: New Data & Evidence, a forthcoming paper in The Journal of Financial Economics written by professors at Harvard Business School (HBS) & MIT Sloan.

Figure 1: Coinbase's Revenue & Core Earnings: 2019-2020



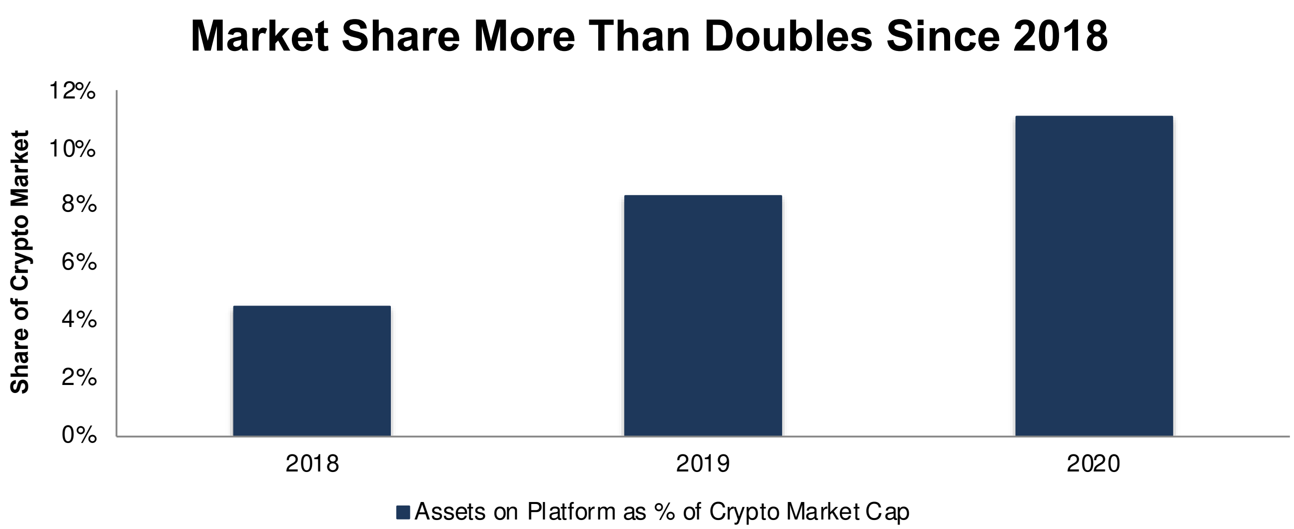
Sources: New Constructs, LLC and company filings

Growing Market Share in Nascent Cryptocurrency Market

Coinbase has grown its Verified Users from 32 million in 4Q19 to 43 million in 4Q20, or 34% YoY. Monthly Transacting Users (MTUs), or those that engage with Coinbase's transaction based products, have grown from 1.0 million to 2.8 million, or 180% YoY, over the same time.

The increase in MTUs, along with rising prices of cryptocurrencies, drives Coinbase's Assets on Platform, or the total value of crypto held on Coinbase, from $7 billion in 2018 to $90 billion in 2020. In turn, Coinbase's market share, measured as Assets on Platform as a percent of total cryptocurrency market cap, has grown from 4.5% in 2018 to 11.1% in 2020, per Figure 2.

Figure 2: Coinbase's Share of Crypto Market: 2018-2020



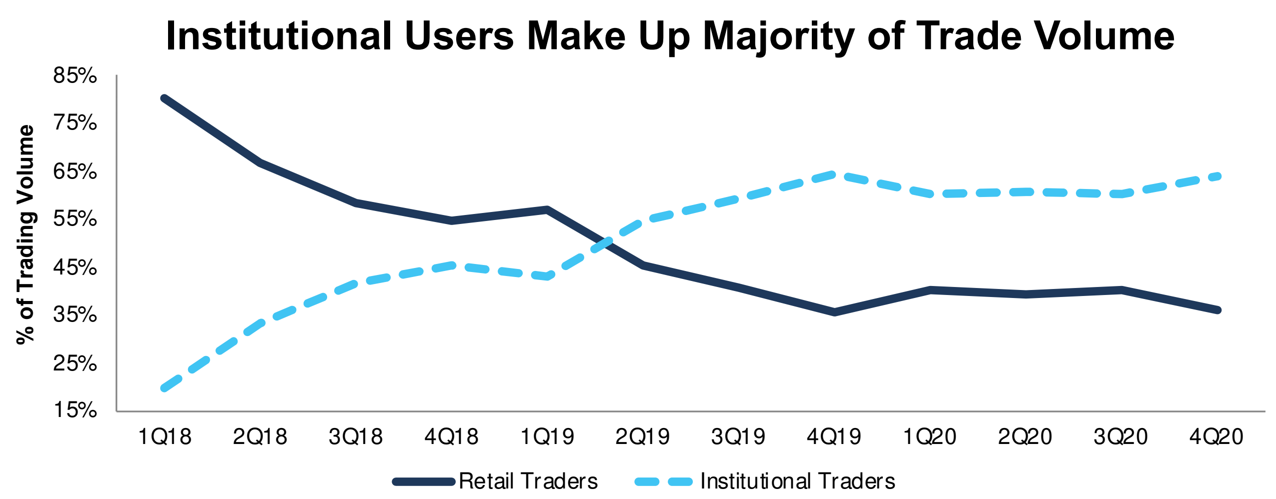
Sources: New Constructs, LLC and company filings

Institutional Users Are Increasingly Driving Volumes

As cryptocurrencies have gained more mainstream acceptance, institutional users' percentage of trading volume on Coinbase has grown from 20% in 1Q18 to 64% in 4Q20. Conversely, retail users' percentage of trading volume on the platform fell from 80% to 36% over the same time. See Figure 3.

Despite making up just 36% of trading volume, retail transactions make up 95% of Coinbase's transaction revenue in 2020, which indicates that retail traders' may make smaller trades, but the frequency of trades generates significantly more in trading fees.

Figure 3: Coinbase's Trading Volume by User Type: 1Q18-4Q20



Sources: New Constructs, LLC and company filings

A Mature Market Could Crush Profitability by 98%

As a leading cryptocurrency exchange and brokerage firm in a nascent market, Coinbase can charge a spread on each trade and a trading fee (which is the greater of a flat fee or a variable percentage fee based on region, product feature, and payment type).

In 2020, Coinbase collected ~0.57% of every transaction in fees, which totaled $1.1 billion in trading revenue on $193 billion in trading volume. In total, these trading fees made up 86% of revenue in 2020.

As the cryptocurrency market matures and more firms inevitably pursue Coinbase's high margins, the firm's competitive position will inevitably deteriorate. For example, if stock trading fees are any indicator for crypto trading fees, we should expect them to quickly go lower if not to zero. Competitors such as Gemini, Bitstamp, Kraken, Binance, and others will likely offer lower or zero trading fees as a strategy to take market share, which would start the same "race to the bottom" that we saw with stock trading fees in late 2019. Similarly, if traditional brokerages begin offering the ability to trade cryptocurrencies, they will most certainly cut down on the unnaturally wide spreads in the immature cryptocurrency market.

For example, if Coinbase's revenue share of trading volume fell to 0.01%, equal to traditional stock exchanges, it's 2020 transaction revenue would have been just $20 million, instead of $1.1 billion.

To get a sense of just how untenable Coinbase's competitive position is, Coinbase's transaction revenue as a percent of trading volume is 57 times higher than Intercontinental Exchange (ICE), which runs the New York Stock Exchange (among others) and Nasdaq Inc. (NDAQ), which runs the Nasdaq. The likelihood of Coinbase maintaining such high fees is very low in a mature market. See Figure 4.

Figure 4: Coinbase 2020 Transaction Revenue Vs. Traditional Exchanges

Company	Ticker	Trading Volume ($b)*	Transaction Revenues ($b)**	Transaction Revenue as % of Volume
Coinbase Global	COIN	$193	$1.1	0.57%
Intercontinental Exchange	ICE	$25,000	$2.6	0.01%
Nasdaq Inc.	NDAQ	$25,000	$2.2	0.01%

Sources: New Constructs, LLC and company filings
*Estimated based on average daily trading volume of $100 billion as reported by Cboe Global Markets.
**ICE and NDAQ transaction revenues equals each firm's cash equity trading revenues

Cryptocurrency Market Remains Niche Despite Recent Headlines

In its S-1, Coinbase notes "crypto has the potential to be as revolutionary and widely adopted as the internet." Such a proclamation is based on the idea that cryptocurrencies allow capital to flow more freely than traditional financial markets due to near instantaneous settlement and real-time payments 24 hours a day, 7 days a week, and 365 days a year. While such a comparison can lead to lofty valuations based on a "growth story", the reality is the cryptocurrency market remains far from "mainstream."

According to data analytics firm CivicScience, 66% of U.S. adults are "not interested in" crypto and 18% have "never heard of it." Similarly, CivicScience finds that while the number of people investing in cryptocurrencies is rising quickly, it still remains low at just 9% of U.S. adults. For reference, Pew Research Center estimates 90% of U.S. adults used the internet in 2019.

The vast disconnect between people using cryptocurrency and the narrative that it will replace the existing financial system can help partly explain Coinbase's lofty valuation. However, one would be hard pressed to make a compelling argument that the firm's fundamentals can actually justify such a valuation, as we'll show below.

Coinbase Is Priced to Be the Largest Exchange (by Revenue) in the World

When we use our reverse discounted cash flow (DCF) model to analyze the future cash flow expectations baked into Coinbase's expected valuation, we find that shares are priced for beyond perfect execution.

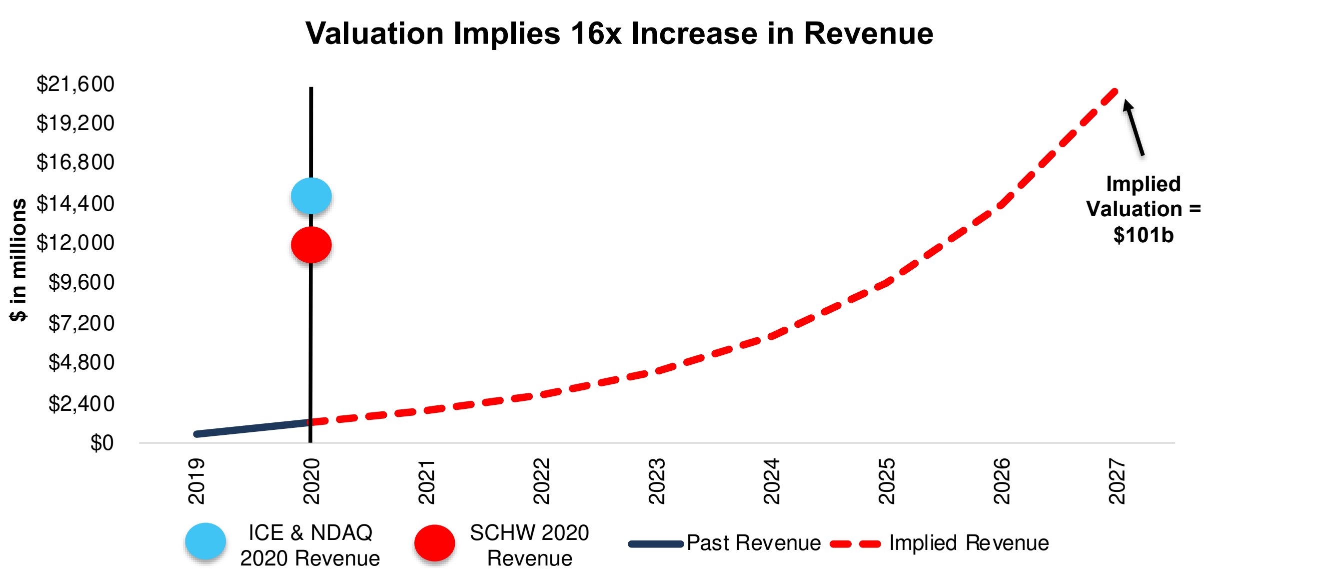
In order to justify its expected $100 billion valuation, Coinbase must:

- maintain a 25% NOPAT margin (above Nasdaq's 19% but below Intercontinental Exchanges' 31% in 2020) and
- grow revenue by 50% compounded annually (well above Nasdaq's highest seven-year revenue CAGR [2004-2011] of 30%) for the next seven years. See the math behind this reverse DCF scenario.

In this scenario, Coinbase would earn $21.3 billion in revenue by 2027, which would be 1.5x Intercontinental Exchange and Nasdaq's combined 2020 revenue, 46% of the TTM revenue of the 11 top Financial & Commodity Market Operators[2], and nearly double Charles Schwab's 2020 revenue.

Figure 5 compares the firm's implied future revenue in this scenario to its historical revenue, along with the revenue of exchange and brokerage competitors in 2020.

Figure 5: Expected Valuation Implies Greater Revenue Than ICE & NDAQ Combined



Sources: New Constructs, LLC and company filings

[2] Firms in this group include Cboe Global Markets (CBOE), CME Group (CME), Deutsche Boerse AG (DBOEF), Fidelity National Information Services (FIS), GreenSky (GSKY), Interactive Brokers Group (IBKR), Intercontinental Exchange (ICE), MarketAxess Holdings (MKTX), Nasdaq Inc. (NDAQ), Tradeweb Markets (TW), and Virtu Financial (VIRT).

If Coinbase maintained its fees at 0.57% of trading volume (as outlined above), this scenario implies that trading volume on Coinbase's platform would be $3.7 trillion by 2027, which would equal 78% of the total cryptocurrency trading volume in 2020.

But What If Coinbase Is Not the Largest Exchange in the World?

We review an additional DCF scenario to highlight the downside risk should Coinbase see profitability fall in-line with traditional brokerages as competition enters the market and cryptocurrency trading becomes a more commoditized business.

If we assume Coinbase's:

- NOPAT margin falls to 23% (market-cap-weighted average of 18 Investment Banking & Brokerage Services firms under coverage, compared to 25% in 2020) and
- revenue grows by 21% compounded annually for the next decade (Nasdaq's greatest 10-year revenue CAGR), then

COIN is worth just $18.9 billion – an 81% downside to the expected valuation. See the math behind this reverse DCF scenario. However, matching Nasdaq's fastest 10-year revenue CAGR could prove too optimistic given the volatile nature and niche status of the cryptocurrency market. If cryptocurrency fails to break through on a more mainstream level and trading volumes remain dwarfed by stock trading, Coinbase's growth story would end and the stock would drop precipitously. The company could go bankrupt.

Each of the above scenarios also assumes Coinbase's working capital and fixed assets increase YoY at a rate equal to 10% of revenue. This growth in invested capital is just under half the YoY change in invested capital as a percent of revenue in 2020.

IPO/Direct Listing Is Not Without Warning Flags

Despite a profitable business, investors should be aware that Coinbase's S-1 is not absent some notable red flags.

Public Shareholders Have No Rights. A risk of investing in Coinbase, as with many recent IPOs, is the fact that that the shares sold provide little to no say over corporate governance.

Coinbase is going public with two separate share classes, each with different voting rights. Coinbase's direct listing is for Class A shares, with one vote per share. Class B shares provide 20 votes per share and are held by company executives and early investors. For instance, Co-founder and CEO Brian Armstrong holds 22% of the voting power, and all executives and directors collectively hold 54% of the voting power. Notable investor Marc Andreessen owns 14% of the voting power in the firm through Andreesen Horowitz. In the end, all public investors combined can expect to gain no more than ~17% of voting power after rewarding the company with a stupendous valuation.

Concentration Risk is Large

Investors in Coinbase must be aware that the firm's heavy reliance on Bitcoin and Ethereum create unique concentration risks. In 2020, Bitcoin and Ethereum accounted for 56% of Coinbase's trading volume and an equal percentage of transaction revenue. Should demand for these two crypto currencies decline without an offsetting increase in new cryptocurrencies, Coinbase could see significant cuts to its trading volume and transaction revenue.

Non-GAAP EBITDA Overstates Profitability

While often a favorite of unprofitable companies, Coinbase still presents investors with an overstated picture of its fundamentals through its use of adjusted EBITDA. Adjusted EBITDA allows management significant leeway in excluding costs in its calculation. For example, Coinbase's adjusted EBITDA calculation removes stock-based compensation expense, acquisition related expenses, and more.

Coinbase's adjusted EBITDA in 2020 removes $205 million (16% of revenue) in expenses including $70 million in stock-based compensation expense. After removing these items, Coinbase reports adjusted EBITDA of $527 million in 2020. Meanwhile, economic earnings, the true cash flows of the business, are much lower at $285 million.

While Coinbase's adjusted EBITDA follows the same trend in economic earnings over the past two years, investors need to be aware that there is always a risk that adjusted EBITDA could be used to manipulate earnings going forward.

Emerging Growth Company Designation Means Less Transparency

Coinbase ceased to be an Emerging Growth Company as of December 31, 2020. However, because it filed its draft registration statement to the SEC prior to this date, it is still able to take advantage of the reduced disclosure requirements available to Emerging Growth Companies. We've outlined these reduced disclosure requirements here. This designation means reduced transparency for investors, which only increases the risk of investing in Coinbase.

Critical Details Found in Financial Filings by Our Robo-Analyst Technology

Fact: we provide superior fundamental data and earnings models – unrivaled in the world.
Proof: Core Earnings: New Data and Evidence, forthcoming in The Journal of Financial Economics.

Below are specifics on the adjustments we make based on Robo-Analyst findings in Coinbase's S-1:

Income Statement: we made $31 million of adjustments, with a net effect of removing $1 million in non-operating income (<1% of revenue). You can see all the adjustments made to Coinbase's income statement here.

Balance Sheet: we made $1.5 billion of adjustments to calculate invested capital with a net decrease of $968 million. The most notable adjustment was $1.1 billion in excess cash. This adjustment represented 67% of reported net assets. You can see all the adjustments made to Coinbase's balance sheet here.

Valuation: we made $12.9 billion of adjustments with a net effect of decreasing shareholder value by $10.8 billion. The largest adjustment to shareholder value was $11.5 billion in outstanding employee stock options. This adjustment represents 12% of Coinbase' expected market cap. See all adjustments to Coinbase's valuation here.

This article originally published on March 5, 2021.

Disclosure: David Trainer, Kyle Guske II, and Matt Shuler receive no compensation to write about any specific stock, style, or theme.

Follow us on Twitter, Facebook, LinkedIn, and StockTwits for real-time alerts on all our research.

It's Official: We Offer the Best Fundamental Data in the World

Many firms claim their research is superior, but none of them can prove it with independent studies from highly-respected institutions as we can. Three different papers from both the public and private sectors show:

1. Legacy fundamental datasets suffer from significant inaccuracies, omissions and biases.
2. Only our "novel database" enables investors to overcome these flaws and apply reliable fundamental data in their research.
3. Our proprietary measures of Core Earnings and Earnings Distortion materially improve stock picking and forecasting of profits.

Best Fundamental Data in the World

Forthcoming in The Journal of Financial Economics, a top peer-reviewed journal, Core Earnings: New Data & Evidence proves our Robo-Analyst technology overcomes material shortcomings in legacy firms' data collection processes to provide superior fundamental data, earnings models, and research. More details.

Key quotes from the paper:

- "[New Constructs'] *Total Adjustments* differs significantly from the items identified and excluded from Compustat's adjusted earnings measures. For example… 50% to 70% of the variation in *Total Adjustments* is not explained by *S&P Global's (SPGI) Adjustments* individually." – pp. 14, 1st para.
- "A final source of differences [between New Constructs' and S&P Global's data] is due to data collection oversights…we identified cases where Compustat did not collect information relating to firms' income that is useful in assessing core earnings." – pp. 16, 2nd para.

Superior Models

A top accounting firm features the superiority of our ROIC, NOPAT and Invested Capital research to Capital IQ & Bloomberg's in Getting ROIC Right. See the Appendix for direct comparison details.

Key quotes from the paper:

- "…an accurate calculation of ROIC requires more diligence than often occurs in some of the common, off-the-shelf ROIC calculations. Only by scouring the footnotes and the MD&A [as New Constructs does] can investors get an accurate calculation of ROIC." – pp. 8, 5th para.
- "The majority of the difference…comes from New Constructs' machine learning approach, which leverages technology to calculate ROIC by applying accounting adjustments that may be buried deeply in the footnotes across thousands of companies." – pp. 4, 2nd para.

Superior Stock Ratings

Robo-Analysts' stock ratings outperform those from human analysts as shown in this paper from Indiana's Kelley School of Business. Bloomberg features the paper here.

Key quotes from the paper:

- "the portfolios formed following the buy recommendations of Robo-Analysts earn abnormal returns that are statistically and economically significant." – pp. 6, 3rd para.
- "Our results ultimately suggest that Robo-Analysts are a valuable, alternative information intermediary to traditional sell-side analysts." – pp. 20, 3rd para.

Our mission is to provide the best fundamental analysis of public and private businesses in the world and make it affordable for all investors, not just Wall Street insiders.

We believe every investor deserves to know the whole truth about the profitability and valuation of any company they consider for investment. More details on our cutting-edge technology and how we use it are here.

DISCLOSURES

New Constructs®, LLC (together with any subsidiaries and/or affiliates, "New Constructs") is an independent organization with no management ties to the companies it covers. None of the members of New Constructs' management team or the management team of any New Constructs' affiliate holds a seat on the Board of Directors of any of the companies New Constructs covers. New Constructs does not perform any investment or merchant banking functions and does not operate a trading desk.

New Constructs' Stock Ownership Policy prevents any of its employees or managers from engaging in Insider Trading and restricts any trading whereby an employee may exploit inside information regarding our stock research. In addition, employees and managers of the company are bound by a code of ethics that restricts them from purchasing or selling a security that they know or should have known was under consideration for inclusion in a New Constructs report nor may they purchase or sell a security for the first two days after New Constructs issues a report on that security.

DISCLAIMERS