EQUITY RESEARCH

INITIATION OF COVERAGE

May 10, 2021

EXCHANGES, INFORMATION ANALYTICS & ASSET MANAGERS

Stock Rating:

OUTPERFORM

12-18 mo. Price Target	$434.00
COIN - NASDAQ	$263.70

3-5 Yr. EPS Gr. Rate	NA
52-Wk Range	$429.54-$250.51
Shares Outstanding	205.6M
Float	119.0M
Market Capitalization	$52,529.0M
Avg. Daily Trading Volume	NA
Dividend/Div Yield	NA/NM
Book Value	NA
Fiscal Year Ends	Dec
2021E ROE	20.4%
LT Debt	$82.5M
Preferred	$0.0M
Common Equity	$964M
Convertible Available	No

Note: Trading range is since 4/14/2021 IPO

Revenue ($/mil)	Q1	Q2	Q3	Q4	Year	Mult.
2020A	190.6	186.4	315.4	585.1	1.3B	NM
2021E	1.9B	1.3B	1.2B	1.2B	5.6B	NM
2022E	1.3B	1.5B	1.6B	1.6B	6.0B	NM
2023E	1.5B	1.7B	1.9B	1.9B	7.1B	NM
EBITDA ($/mil)	Q1	Q2	Q3	Q4	Year	Mult.
2020A	56.3	61.2	123.2	287.7	528.4	NM
2021E	1.04B	522.3	445.5	449.2	2.46B	NM
2022E	449.1	507.5	564.6	567.4	2.09B	NM
2023E	543.1	613.6	682.7	667.7	2.51B	NM
EPS	Q1	Q2	Q3	Q4	Year	Mult.
2020A	--	--	--	--	--	NM
2021E	3.88	1.66	1.39	1.41	8.13	32.4x
2022E	1.40	1.61	1.80	1.81	6.63	39.8x
2023E	1.73	1.97	2.21	2.16	8.08	32.6x

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Coinbase Global

A Platform For Digital Asset Innovation; Initiating at Outperform and PT of $434

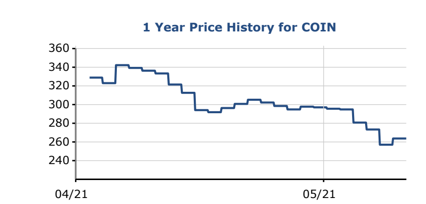
SUMMARY

We are initiating coverage of Coinbase Global (COIN) with an Outperform rating and a $434 price target. We view COIN as an enabler of crypto innovation which solves some pain points in the existing financial system while leveraging its trading arm to monetize the success. These pain points include: 1) inflationary pressure on local currency and non-credible central bank in some countries; 2) underbanked and underserved people don't have access to existing banking system for money transfers or cross-border transactions; 3) there are fees charged for these transactions and it takes some time for cross-border transactions to be processed. As a leader in the cryptoeconomy, COIN acts as a platform for innovation and appears well positioned to benefit from the mass adoption of digital assets.

KEY POINTS

- **Why Coinbase?** Our positive outlook is based on a strong business model that includes: 1) deep liquidity pool and strong network effect; 2) trust from customers given its focus on regulatory compliance; 3) strong brand as a secure platform; and 4) platform for innovation which produces a virtuous cycle for monetization.
- **Why Now?** After the hype surrounding the direct listing, COIN has retreated from the opening price of ~$380 to ~$270 currently. Given the recent volatility of crypto prices, increasing institutional (i.e., trading and treasury management) acceptance of crypto and higher demand for retail crypto products, we believe the earnings upside potential is significant, and in our view, current valuation provides an attractive entry point.
- **Our Variant View:** The market seems to believe: 1) COIN is a high beta stock; 2) fee pressure has substantial impact on COIN's model; 3) COIN is *just* a crypto exchange. Based on our research and due diligence, we believe that: 1) volatility of crypto/bitcoin price should support COIN's revenue growth; 2) fee compression concern is overblown; 3) COIN is a platform for innovation.
- **Comp and Valuation:** We believe that COIN is a combination of high growth exchange, payment infrastructure, internet and software/SaaS company, and the crypto opportunity is very similar to ESG. Therefore, we use MKTX, PYPL, MSCI, ABNB and DOCU as the comps. We use 16.0x P/S (~average of COIN and comps) multiple on our 2022E $6.0B revenue to arrive at the PT of $434.
- **Bottom Line:** Our recommendation heavily rests on our long-term positive view toward the disruptive nature of crypto, particularly on cross-border money transfers, payments infrastructure and tokenization. That said we do recognize that the stock could be quite volatile driven by the bitcoin price and news flow. Therefore, we believe COIN is well suited for long-term-oriented investors who could tolerate near-term volatility.

Stock Price Performance

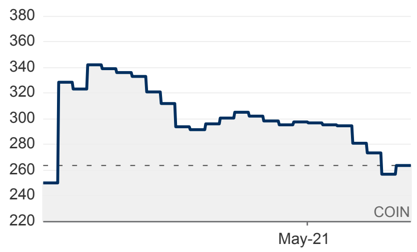


Company Description

COIN is an enabler of crypto innovation which solves some pain points in the existing financial system, and leverages its trading arm to monetize the success. The company has a vertically integrated model which consists of exchange, brokerage, custody, crypto incubator, payments, money transfer and settlement.

For analyst certification and important disclosures, see the Disclosure Appendix.

5-YEAR PRICE PERFORMANCE



Source: Bloomberg

INVESTMENT THESIS

We view COIN as an enabler of crypto innovation which solves some pain points in the existing financial system, and leverages its trading arm to monetize the success. Our positive outlook on the shares is based on a strong business model that includes: 1) deep liquidity pool and strong network effect; 2) trust from customers given its focus on regulatory compliance; 3) strong brand as a secure platform; and 4) platform for innovation which produces a virtuous cycle for monetization. As a leader in the cryptoeconomy, we believe COIN is well positioned to benefit from the mass adoption of digital assets.

BASE CASE ASSUMPTION

- Continued adoption in digital assets for retail, corporate and investment community
- Continued growth in monthly transacting users (MTU)
- Continued growth in average revenue per user
- Continued growth of non-transaction revenue

CATALYSTS

- Launch of new crypto products
- Acquisitions
- Better than expected revenue and earnings growth

UPSIDE SCENARIO

- Higher than expected growth in monthly transacting users (MTU)
- Higher than expected growth in average revenue per user
- Higher than expected growth of non-transaction revenue
- Higher than expected growth in crypto market cap
- Lower than expected fee compression

DOWNSIDE SCENARIO

- Lower than expected growth in monthly transacting users (MTU)
- Lower than expected growth in average revenue per user
- Lower than expected growth of non-transaction revenue
- Lower than expected growth in crypto market cap
- Higher than expected fee compression

PRICE TARGET CALCULATION

We apply a 16.0x P/S multiple to our 2022E $6.0B revenue to arrive at the price target of $434. Consensus expects COIN to grow the top line much faster than our comps, and its EBITDA margin is much higher than the comps. That said, given the uncertainty of COIN's revenue and earnings, we believe 16.0x P/S multiple, which is the comp average, is appropriate. We believe that COIN has room for further multiple expansion when/if COIN can demonstrate sustainable annual revenue growth longer term.

KEY RISKS TO PRICE TARGET

- **Crypto Price Volatility—**A period of declining bitcoin price and/or low crypto price volatility could negatively impact the sentiment and trading volume of crypto.
- **AML Risk—**Perception of crypto as a source of money laundering and/or terrorist financing may cause support of crypto to decline or be banned.
- **Revenue Concentration in Bitcoin and Ethereum—**COIN would be negatively impacted if there is a price decline in bitcoin and Ethereum, a reduction in mining rewards and 51% attacks.
- **Technology Risk in Underlying Network—**Many crypto networks are in the process of implementing software upgrades, which could introduce bugs and security risks.
- **Regulation—**The United States and in other countries may adopt new laws and regulations which may negatively impact the development of digital assets.
- **New Entrants—**Rapidly evolving landscape subject to changing technology/customer needs. Increased competition may reduce user/AUM/trading volume growth, resulting in higher cost and lower margins for the business.

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Investment Summary

We are initiating coverage of Coinbase Global (COIN) with an Outperform rating and a price target of $434.

We want to make it clear upfront that our recommendation heavily rests on our long-term positive view toward the disruptive nature of crypto, particularly on cross-border money transfers, payments infrastructure and tokenization. That said we do recognize, based on the limited trading history of COIN on the public exchange, the stock could be quite volatile driven by bitcoin price and newsflow. In the near term, we don’t foresee this high volatility would disappear even though it could abate. Therefore, we believe COIN is well suited for long-term-oriented investors who could tolerate near-term volatility.

Based on our experience covering this space and talking to investors, some investors sell crypto stocks after, say a miserable five-day bear run. This is partly driven by the generally accepted notion that it is difficult to: 1) predict the revenue/earnings trajectory; and 2) estimate the valuation of the stock with high confidence, at least at this early stage of the crypto development. Note, we are not asking investors to hold crypto stocks after a bad run, rather we urge investors to exercise additional caution before investing in crypto names. Again, we reiterate that COIN is not a stock for everyone, in our view.

Another observation dug from its limited trading history is COIN tends to slide along with a rapid drop in bitcoin price. While there is merit to question COIN’s long-term revenue outlook if bitcoin price continues to go down for a long time, we think it is more reasonable to assume that volatility of bitcoin and other crypto actually spurs trading volume, and in turn revenue growth for COIN.

While COIN is widely known as a crypto exchange, it has a vertically integrated model which consists of exchange, brokerage, custody, crypto incubator, payments, money transfer and settlement. In our view, this behemoth creates a strong moat for deep liquidity pool and a platform for innovation which, in our view, is massively misunderstood. This underappreciation is also partly driven by the market’s intense focus on the volatility of bitcoin price and its knee-jerk association with the performance of COIN.

We view COIN as an **enabler of crypto innovation** which solves some of the pain points in the existing financial system, and leverages its trading arm to monetize the success. Therefore, we believe the **long-term performance of COIN is tied to how disruptive digital assets are on financial infrastructure, as opposed to merely the daily volatility and price trend of bitcoin**. We recognize that COIN will have strong correlation with bitcoin and be volatile along the way, but for long-term-oriented investors who can look past short-term volatility, which can be extreme sometimes, the return could be substantial.

We have identified three pain points that can play a meaningful role in owning digital assets: 1) *inflationary pressures* on local currencies and non-credible central banks in some countries. In these countries bitcoin and other crypto assets become the currency to hedge inflation, and serve the purpose of *store of value*; 2) *underbanked and underserved people* don’t have access to existing banking system for money transfer or cross-border transactions because they don’t have a bank account. Crypto democratizes the access to financial infrastructure, and facilitates *payments and money transfers*; 3) even if people have access to the banking system such as SWIFT, there are *fees* (~$50) charged for the transaction and it takes roughly two days for cross-border transactions to be processed. Crypto has the infrastructure that can substantially cut the fee and time (i.e., instant processing) for the transaction.

With regard to COIN being a winner in this space, our positive outlook is predicated upon a strong business model that includes: 1) deep liquidity pool and strong network effect; 2) trust from customers given its focus on regulatory compliance; 3) strong brand as a secure platform; and 4) platform for innovation which produces a virtuous cycle for monetization.

Deep liquidity pool: There is a perception, an incomplete one in our view, that COIN doesn't have a moat in its exchange business because it is not difficult to create a crypto exchange, and there are over 500 crypto exchanges globally with more to come. We agree that there will always be competitive pressure from existing and new entrants, but building an exchange with deep liquidity pool and high profitability is very difficult to do. A deep liquidity pool very often attracts more traders and market makers to join, which further strengthens the network effect. It is not something a new exchange can easily achieve. Examining the evolution of traditional exchanges (e.g. CME, ICE and CBOE), we believe that a vast majority of these crypto exchanges will end up: 1) going out of business because they are non-compliance or unprofitable; or 2) merging with larger players to achieve scale. We believe COIN is well positioned to be one of the few winners in this space in the long term.

Regulatory compliance: COIN is well known for its laser focus on regulatory compliance. While many other exchanges may ignore it or consciously step into the grey area given the nascency of the whole industry, COIN proactively works with regulators to figure out the appropriate regulations for the industry. For example, Coinbase is a founding member of the Crypto Rating Council, a member-owned organization whose purpose is to assess whether the development, issuance, and use of crypto assets have characteristics that could violate US laws. It lends significant credibility to the company and likely provides confidence to the people trading on the platform.

Strong brand: COIN has made substantial investments in cybersecurity, and secured the customers' funds with multiple layers of protection by employing one of the largest hot wallet crime programs in insurance market. The company has a strong track record of being a reliable and safe custodian, with no funds lost due to a security breach of the platform. Additionally, the app/platform is user-friendly and easy for customers to navigate. COIN has built up a strong reputation because of these characteristics, and usually becomes the gateway for people to enter into the cryptoeconomy.

Platform for innovation: COIN provides developers and merchants a technology platform which enables ecosystem partners to build new crypto applications and accept crypto as payment. Because of COIN's deep liquidity pool, developers and merchants are attracted to the platform. Additionally if the new crypto is listed, it will be viewed as recognition of the project. From COIN's perspective, a successful and valuable crypto application could generate incremental trading volume, which should attract more ecosystem partners to join the platform. This flywheel creates a virtuous cycle for COIN to monetize on its trading arm.

We believe that COIN is a combination of a high growth exchange, payment infrastructure, internet and software/SaaS company, and the development and opportunity of crypto is also incredibly similar to that of ESG. In particular, COIN has some characteristics that set it apart from other exchanges: 1) it is an integrated model with a dominant exchange arm; 2) it operates in a nascent market and the total addressable market is growing rapidly; and 3) it further enables electronification and reduces lead time. When selecting comps, we tend to pick the companies which possess one or more of the above characteristics. Therefore, we believe MKTX (exchange), PYPL (payment), MSCI (ESG), ABNB (internet) and DOCU (SaaS) are appropriate comps for valuing COIN.

We apply a 16.0x P/S multiple to our 2022 $6.0B revenue estimate to arrive at the price target of $434. As shown in **Exhibit 1**, consensus expects COIN to grow the top line much faster than the comps (i.e., ~90% CAGR from 2020 to 2022E for COIN versus ~20% for the comps), and its 2021E EBITDA margin is much higher than the comps (i.e., 43% for COIN versus 29% for the comps). That said, given the uncertainty of COIN's revenue and earnings, we believe 16.0x P/S multiple which is the comp average is appropriate. We believe that COIN has room for further multiple expansion when/if COIN can demonstrate sustainable annual revenue growth longer term.

We recognize the uncertainty of trading revenue in any given quarter, and the evolution of the business model could greatly influence the valuation. Therefore, we are prepared to adjust our methodology if we think it is no longer appropriate to value the company.

Exhibit 1. Comparison of Selected Comps

	Coinbase (COIN)	Emerging Tech with Growing TAM	Traditional Exchanges & Alternative Trading Systems	Transaction Solutions
Selected Peers	coinbase	MarketAxess, PayPal, MSCI, airbnb, DocuSign	ASX, Cboe, CME Group, Euronext, HKEX, ICE, London Stock Exchange, Nasdaq, SGX, TMX	ACI, adyen, Bill.com, EPAY, FIS, fiserv., globalpayments, jack henry & Associates Inc., PayPal, REPAY, Shift4 Payments, Square
2020-2022E Revenue CAGR	90.2%	20.2%	8.7%	14.2%
2021E EBITDA Margin	42.0%	29.4%	61.3%	35.0%
P/2021E Revenue	11.7x	21.9x	9.3x	8.1x
EV/2021E Revenue	11.6x	21.5x	9.8x	8.9x
EV/2021E EBITDA	27.6x	40.8x	15.6x	22.1x

Source: FactSet, company reports and Oppenheimer & Co. Inc.

Pain Points in Financial System

A vast majority of today's financial systems such as banking systems, settlement systems, custodians, payment systems, etc. are built on continuous patchwork of legacy coding. The benefits of fixing and upgrading the code/system instead of re-writing/re-designing the whole system are: 1) it shortens the time to production; 2) it reduces the chance to introduce more bugs/errors; and 3) it is viewed as a more reliable option because customers have been using it for a while.

However, we think implementing legacy coding for a few decades could marginalize incremental benefits and could exponentially increase the resistance to change. The implication is it could impose a number of limitations, and create pain points for the financial systems. These pain points include:

1. Access to global money transfer system for unbanked people: According to Global Findex, about 1.7B adults in the world were unbanked in 2017, representing ~22% of global population. These underserved people without a banking relationship are unable to access the global money transfer system to send money to friends and support family members in other countries.

2. Additional cost/fees for payment and money transfer: Consumers could be charged a total fee of ~$60 (i.e., a payment of ~$45 to the bank which sends the money out and ~$15 to the bank which receives the money) when they use SWIFT to transfer money globally. There are some other non-bank options with lower fees but they aren't free.

3. Relatively long time lag (e.g. up to 2 days lag) for payment and money transfer: Even if consumers have access to bank accounts and can afford to pay the fees, it usually takes around 1-2 days to transfer money globally by using SWIFT. Some non-bank options can shorten the time lag, but it is still not instant.

4. Relatively long settlement time (e.g. T+2) for a trade in capital markets: For the settlement of cash equities, it typically takes two days after the transaction. While the key stakeholders have attempted, and in some instances had successfully shortened the time for this settlement, it appears that there is still limitation and resistance in the existing system to ultimately achieve T+0.

5. Ever increasing money supply from central banks creates inflationary pressure for fiat currencies: Other than the financial infrastructure, helicopter money is another pain point in the financial system. For government / central bank with little to no credibility, printing money will add tremendous inflationary pressure to local currency.

6. Fraud and forgery: The immutable characteristic for blockchain technology is a foundation for the popularity of non-fungible token (NFT), which stores data uniquely on a digital ledger. Because the record can't be changed, it essentially certifies the digital asset to be the original one, and provides the owner with a proof of ownership. There are numerous use cases in art, music, photo, etc.

Digital assets, and the underlying infrastructure supporting these digital assets, rely on open-source, software-based networks which are easily maneuvered. In short, it can be programmed in a way that can reduce the friction of transaction such as access, time and cost.

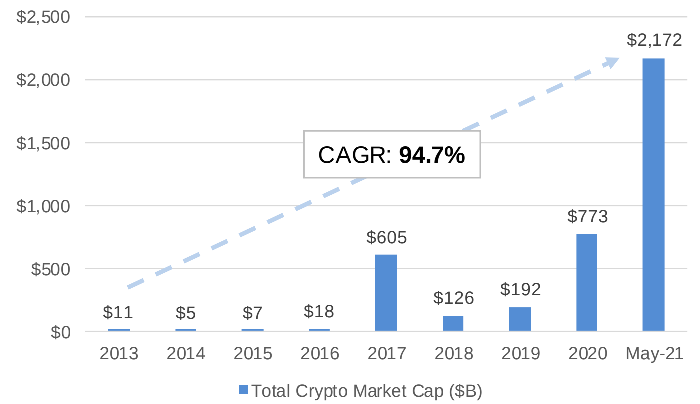
Right before the Great Recession, the size of the Fed's balance was ~$900B. Exiting 2010 it expanded to ~$2.4T, and further upsized to $4.5T at the end of 2014. Despite the Fed trimming it down to $3.8T in 2019, the balance sheet ballooned to $7.6T because of the COVID-19 pandemic. This ever expanding Fed's balance sheet partly assists the narrative of crypto (bitcoin in particular) being an inflation hedge due to its finite supply. As of February 2021, ~18.6M bitcoins out of a total of 21M have been mined. It is estimated that by 2140 the remaining 2.4M will be mined completely.

Additionally crypto doesn't sleep and allows transactions to occur 24/7/365, and is real-time even for cross-border payments. More importantly, there are no/low transaction fees. Coinbase, as a medium to facilitate the conversion between fiat currency and cryptocurrency, plays a critical role to enable the digital assets ecosystem, which ultimately solves the pain points and reduces the friction.

Potential Size of Opportunity

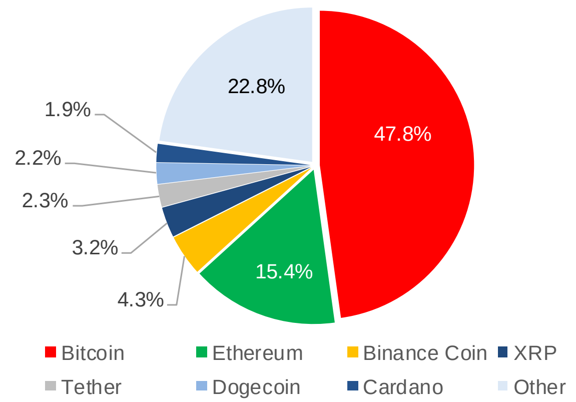
In our view crypto/digital assets have the potential to have a revolutionary impact on exchanges, brokerages, payments, wealth management, banking and tokenization. What we have seen over the past decade is the increasing acceptance of cryptocurrencies as the form of store of value and as a medium of money transfer and payments. As illustrated in **Exhibit 2**, the market cap of crypto grew from ~$11B at the end of 2013 to ~$126B in 2018, and further up to ~$2.2T in May 2021. Out of the ~$2.2T, around 48% came from Bitcoin, ~15% from Ethereum and ~4% from Binance Coin as shown in **Exhibit 3**.

Exhibit 2. Historical Crypto Total Market Cap



Source: Coinmarketcap.com and Oppenheimer & Co. Inc.

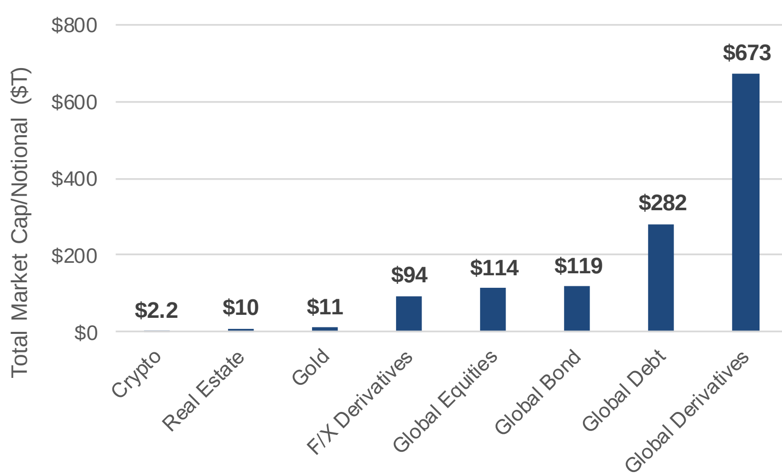
Exhibit 3. Composition as of April 2021



Source Coinmarketcap.com and Oppenheimer & Co. Inc.

While we don't have the exact amount of TAM for the cryptoeconomy, we believe the market cap of crypto will continue to grow. Our base case scenario is it will reach the market cap of gold by 2030 assuming a CAGR of 20%. Our bull case scenario is it will approach the notional value of global F/X derivatives by the end of 2040 assuming the same growth rate. When/if crypto successfully expands into tokenization, we won't be surprised to see it will take a slice from global equities and global bond market. **Exhibit 4** below shows the total market cap / notional value of market asset classes.

Exhibit 4. Total Market Cap / Notional Value of Major Asset Classes



Source: Coinmarketcap, Bank for International Settlements, Institute of International Finance, World Federation of Exchanges, World Gold Council, GoldPrice.Org, MSCI and Oppenheimer & Co. Inc.

Note: Crypto as of May. 2021. Real Estate as of 4Q19. Global Bond as of 3Q20. Global Debt as of 4Q20. Others are as of 1Q21.

While the cryptoeconomy has experienced rapid growth, the whole ecosystem is still nascent (~12 years old) and has a lot of runway in our view. Back in 2018 the number of verified users with Coinbase was 26M, it grew to 43M in 2020. Coinbase's goal is to bring crypto-based financial services to all smartphone users, which is estimated to be in the ballpark of 3.5B in terms of the number of devices. The low penetration rate (~1.2%) leaves us to believe that Coinbase has a substantial room to grow.

At this point, it doesn't appear that Coinbase is moving toward being the brokerage/exchange for traditional asset classes because they are very well served by existing players such as Charles Schwab, Robinhood, CME, ICE, etc. Instead the company's goal is to continue to be innovative, add crypto-related services, and expand the cryptoeconomy.

Generally speaking, Coinbase drives growth through three broad strategies: 1) adding more customers; 2) expanding the depth and breadth of crypto assets; and 3) launching new products. To estimate the near term total addressable market (TAM), we start with the average retail monthly transacting users, or MTUs, of 1.9M and net revenue in 2020 of $1.1B. Given that 1.9M average users generate $1.1B in net revenue, we estimate that 3.5B smartphone users can produce a TAM of $1.1B x 3.5B / 1.9M = $2T. The served available market (SAM), of course, could be much lower than that.

We believe, however, that the actual TAM could be much larger than $2T. It is because our estimate only accounts for full mobile penetration for crypto traders/customers with existing trading products. It doesn't account for additional revenue from 1) new crypto/assets (i.e. new coins for trading revenue), and 2) new products other than trading (i.e. custodial fee revenue, staking revenue, earn campaign/educational/distribution revenue and license/analytics revenue).

Investment Thesis for COIN

1. Deep Liquidity Pool and Strong Network Effect

There is a perception an incomplete one in our view, that COIN doesn't have a moat in its exchange business because it is not difficult to create a crypto exchange, and there are over 500 crypto exchanges globally with more to come. We agree that there will always be competitive pressure from existing and new entrants, but building an exchange with deep liquidity pool and high profitability is very difficult to do. A deep liquidity pool very often attracts more traders and market makers to join, which further strengthens the network effect. It is not something a new exchange can easily achieve. If the evolution of traditional exchanges (e.g. CME, ICE and CBOE) is a good reference, we believe that a vast majority of these crypto exchanges will end up: 1) going out of business because they are non-compliant or unprofitable; or 2) merging with larger players to achieve scale. We believe COIN is well positioned to be one of the few winners in this space in the long term.

2. Trusted Platform with Strong Culture of Regulatory Compliance

One of the under-rated moats for Coinbase is its strict regulatory compliance which earns the company tremendous credibility among its customers. Even in early days, Coinbase actively engaged with regulators and law enforcement agencies to drive policy and practices favorable to the cryptoeconomy. The company tried to make sure it is licensed to operate legally in area such as money transmission and virtual currency businesses in almost all states in the US.

The company also makes substantial investments in cybersecurity, and secures the customers' funds with multiple layers of protection by employing one of the largest hot wallet crime programs in insurance market. Coinbase has a strong track record of being a reliable and safe custodian, with no funds lost due to a security breach of the platform. As of the end of 2020, 15%-plus of the company's full-time employees were dedicated to legal, compliance, finance, and security.

This strong compliance culture lends confidence to COIN of being a backer of stablecoin USDC (co-founded with Circle). To make sure the value of USDC remains steady and stable, USDC partners keep one US dollar on bank accounts when they issue one dollar worth of USDC. These accounts are audited to make sure there are enough fiat dollars to back stablecoin currency. We believe USDC will play a crucial role in money transfers by using cryptocurrency because bitcoin can be volatile, and people may hold bitcoin as a means for speculation instead of using it for transactions. Meanwhile USDC is stable which avoids the exchange risk, so it could be a better medium for transactions.

3. Strong Brand to Support Further Expansion

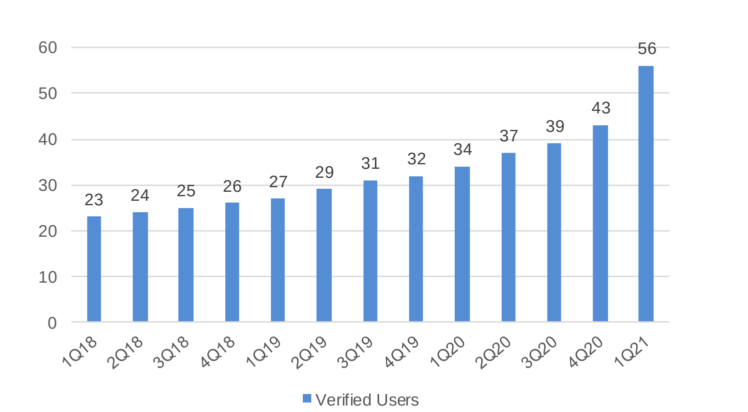
COIN has made substantial investments in cybersecurity, and secured the customers' funds with multiple layers of protection by employing one of the largest hot wallet crime programs in insurance market. The company has a strong track record of being a safe custody, with no funds lost due to a security breach of the platform. Additionally, the app/platform is user-friendly and easy for customers to navigate. COIN has built up a strong reputation because of these characteristics, and usually becomes the gateway for people to enter into the cryptoeconomy.

Because of this strong brand, Coinbase has experienced a substantial growth over the past few years. Since early 2018, Coinbase verified users grew at a ~23% CAGR from 23M to 43M at the end of 2020. Over the same period, assets on platform increased from $13B to $90B with a CAGR of ~91%. It is important to note that the market capitalization for crypto increased at a CAGR of ~42% from $271B to $782B. This means that a large portion of the crypto assets growth on Coinbase was driven by asset inflows instead of merely the appreciation of crypto value.

Monthly transacting users (MTU) and trading volume were a bit lumpy, with both metrics declining steadily over the course of "crypto winter" in 2018. That said, MTU grew at a CAGR of ~76% from 0.9M at the end of 2018 to 2.8M at the end of 2020, and it further grew to 6.1M in 1Q21. Over the same period, trading volume grew at a CAGR of ~184% from $11B to $89B (it reached $335B in 1Q21).

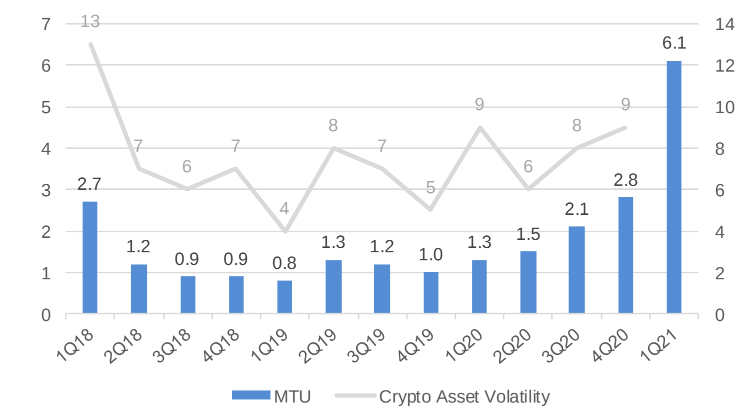
Since 2Q19 institutional trading volume took over as the majority of the total trading volume, and grew from ~55% of total to ~64% in 4Q20, despite revenue contribution from institutional trading still being minimal. We estimate that institutional trading contributed ~62% of total trading volume but only generated ~7% of net revenue in 2020. In the past COIN grew this segment organically supplemented with acquisitions. For example, COIN acquired crypto prime brokerage firm Tagomi in May 2020 and crypto trade execution firm Routefire in January 2021. Given COIN's strong balance sheet and currency, we believe COIN will strategically make acquisitions to supplement organic growth on the institution side.

Exhibit 5. COIN Verified User Growth



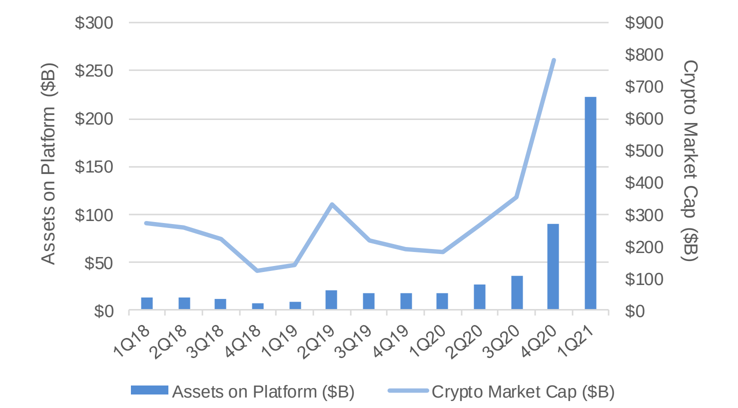
Source: Company Reports and Oppenheimer & Co. Inc.

Exhibit 6. COIN MTU and Crypto Asset Volatility



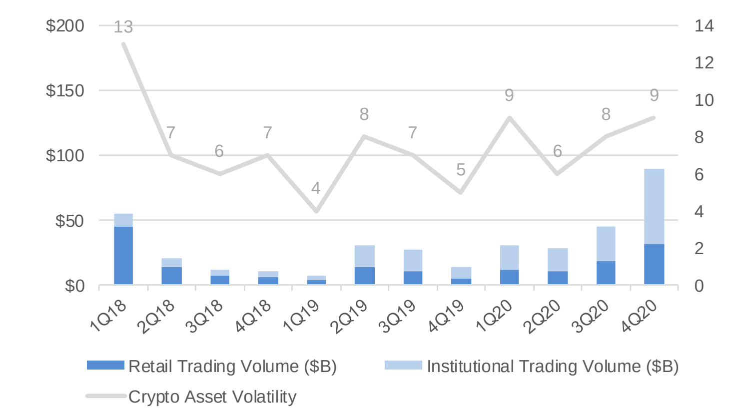
Source: Company Reports and Oppenheimer & Co. Inc.

Exhibit 7. COIN Assets on Platform and Crypto Market Cap



Source: Company Reports and Oppenheimer & Co. Inc.

Exhibit 8. COIN Trading Volume



Source: Company Reports and Oppenheimer & Co. Inc.

4. Platform for Crypto Innovation

Coinbase is more than just a platform to trade bitcoin. In fact, it supports the trading of over 45 cryptocurrencies for retail and institutional customers. In 2019 bitcoin trading volume accounted for 58% of total cryptocurrency trading volume. It dropped to 41% in 2020, and other crypto assets increased from 18% to 44% over the same period.

Coinbase has three customer bases: retail users (43M customers), institutions including Tesla (reportedly), Tudor, OneRiver Asset Management and MicroStrategy (7,000 customers) and ecosystem partners like Compound, Dapper and helium (115,000 customers). In 2020 retail revenue contributed ~92% of net revenue (note: net revenue represented ~90% of total revenue, the rest was “other revenue”) and was by far the largest revenue stream. Although institutional trading represented ~62% of total trading volume, it only contributed ~7% of net revenue. While still a small revenue contributor at ~1% of net revenue, ecosystem partners is an essential component of the Coinbase ecosystem in our view.

It is because many of these companies were supported by Coinbase from a technology, brand and liquidity standpoint, these “partners” will likely eventually develop products that could fill the holes and be complementary to the cryptoeconomy. Think of Coinbase as an incubator as it provides developers, merchants and asset issuers a platform which enables them to build applications that leverage crypto protocols, actively participate in crypto networks and securely accept crypto as payment.

We believe that this structure creates a virtuous cycle and network effect for crypto product innovation. It allows Coinbase not only to engage with more crypto companies for new ideas, but also to capture more trading revenue from these companies when they become bigger.

Our Variant View

1. Volatility of Bitcoin Price Should Support COIN Shares

It appears to us there is a perception that COIN is a high beta stock because if bitcoin price goes down (e.g. 1%), COIN shares would go down more (e.g. 3%). This perception seems to contradict with the fundamentals of COIN and our analysis of the COIN shares movement. First of all COIN still generates a substantial amount of revenue (86% of total) from trading. Similar to other exchange operators we cover, the higher the price volatility of the underlying assets, the higher the trading volume and in turn revenues/earnings the exchange operators generate are also higher. COIN is no different from this dynamic. Therefore, we believe the volatility of bitcoin price should help the shares of COIN.

To illustrate the actual share performance relative to bitcoin price, we also construct the crypto beta for crypto-related companies as shown in **Exhibit 9**. We broadly categorize them into crypto miner (MARA, RIOT, BTBT, CAN and EBON), crypto investor (TSLA, SQ, MSTR and SI), crypto transactor (VIH, or Bakkt), crypto broker (VYGVF) and crypto exchange (EQOS and COIN).

There are caveats in this analysis: 1) we only have limited trading history of COIN so it may not be statistically significant; and 2) there were wide swings of crypto shares in 2021; therefore, instead of relying on the average beta which is influenced by some extreme crypto beta (some goes up to as high as +40 and as low as -106), we decided to put more emphasis on median beta. As illustrated in **Exhibit 9**, the median crypto beta for COIN is only 0.24.

Exhibit 9. Crypto Beta

	Crypto Miner					Crypto Investor				Crypto Transactor	Crypto Broker	Crypto Exchange	
	MARA	RIOT	BTBT	CAN	EBON	TSLA	SQ	MSTR	SI	VIH	VYGVF	EQOS	COIN
2021TD Median	1.43	1.32	0.63	0.84	0.75	0.18	0.21	1.26	0.64	0.36	0.79	0.54	0.24
2021TD Avg.	*-0.12*	*0.29*	*-0.83*	*1.02*	*-0.70*	*-0.60*	*-0.39*	*1.00*	*0.35*	*1.25*	*0.45*	*0.69*	*-0.27*

Source: FactSet and Oppenheimer & Co. Inc.

2. Fee Pressure Overblown

With regard to the conversation of fee compression and race to the bottom on crypto trading, while we agree that total fees (spread + fees) will come down over time, the impact to revenue is overblown in our view. It is because 1) unlike Robinhood, Charles Schwab and E-Trade, which are brokerage firms, COIN provides integrated services including brokerage, exchange and custody, and charges the fees for a combination of services. 2) Payment for order flow supports zero fees for traditional brokerage but there is no such thing in crypto. 3) Based on our analysis of the development in traditional assets classes, while revenue capture comes down, increasing trading volume is more than offset that pressure to drive revenue growth. Additionally, revenue capture stabilized eventually after years of decline. 4) COIN's strong brand supports a premium fee.

To highlight this point, we have analyzed the long-term revenue trend of key derivatives contracts trading on CME, namely interest rates, equities, energy, F/X, commodities and metals from 2008 to 2020, as well as US cash equities on ICE from 2011 to 2020, to get a sense of the dynamics between spread/fee and revenue.

As shown in **Exhibit 10**, other than commodities all major traditional asset classes have seen their rate per contract (RPC) declined quite meaningfully, for example equities derivatives declined by 21.4% from 2008 to 2020, and F/X which is the one investors see as an asset class closer to crypto, declined by 18.1%. That said the estimated monthly revenue actually increased for all traditional asset classes with an average growth rate of 54.1%, primarily driven by higher average daily trading volume (ADV).

How about US cash equities? Because of innovation and fierce competition from new entrants (e.g. BATS) in 1990s and 2000s, incumbents such as Nasdaq and NYSE suffered tremendous pressures on revenue capture. Over the years, there has been non-stop conversation about fee compression. Based on our analysis of US cash equities revenue for ICE from 2011 to 2020, we found that the results are surprising too many. As shown in **Exhibit 10**, volume and revenue capture have stabilized, or even increased after years of pressure, driving revenue to be up 26% from 2011 to 2020. This is additional evidence that "fee pressure" on COIN is likely to be overblown.

Finally, COIN has been trying to diversify away from trading revenue and building out a suite of subscription products and services, such as Store, Stake, Distribute and Build. The revenues of these products are more recurring in nature, and have much less correlation with crypto volatility and prices.

Exhibit 10. ADV, Fee and Rev. of ICE US Cash Eq. & CME Derivatives Contracts

	ADV			Average RPC			Est. Monthly Revenue ($M)		
Derivatives	2008	2020	Δ	2008	2020	Δ	2008	2020	Δ
Interest Rates	5,396	8,124	50.6%	$0.529	$0.500	-5.5%	$60.7	$84.2	38.5%
Equities	3,606	5,643	56.5%	$0.724	$0.569	-21.4%	$55.9	$68.0	21.7%
Energy	1,416	2,403	69.7%	$1.657	$1.155	-30.3%	$50.0	$58.0	16.0%
FX	619	860	38.9%	$0.917	$0.751	-18.1%	$12.1	$13.6	12.5%
Commodities	815	1,402	72.0%	$1.140	$1.285	12.7%	$19.9	$37.9	91.1%
Metals	223	702	214.8%	$1.772	$1.402	-20.9%	$8.4	$20.6	144.7%
Average			**83.7%**			**-13.9%**			**54.1%**
	ADV			Average RPC			Est. Monthly Revenue ($M)		
Spot	2011	2020	Δ	2011	2020	Δ	2011	2020	Δ
Cash Equities	2,274	2,462	8.3%	$0.038	$0.044	14.4%	$18.2	$22.9	26.0%

Source: CME, ICE and Oppenheimer & Co. Inc.

3. COIN Is a Platform for Innovation

While COIN is widely known as a crypto exchange, it has a vertically integrated model which consists of exchange, brokerage, custody, crypto incubator, payments, money transfer and settlement. In our view, this behemoth creates a strong moat for deep liquidity pool and a platform for innovation which in our view is massively misunderstood. This underappreciation is also partly driven by the market’s intense focus on the volatility of bitcoin price and its knee-jerk association with the performance of COIN.

We view COIN as an **enabler of crypto innovation** which solves some of the pain points in the existing financial system, and leverages its trading arm to monetize the success. Therefore, we believe the long-term performance of COIN is tied to how disruptive digital assets on financial infrastructure are, as opposed to merely the daily volatility and price trend of bitcoin. We recognize that COIN will have strong correlation with bitcoin and can be volatile along the way, but for long-term oriented investors who can look past short-term volatility, which can be extreme at times, the return could be substantial.

Valuation

We apply a 16.0x P/S multiple to our 2022 $6.0B revenue estimate to arrive at the price target of $434.

We believe that COIN is a combination of a high growth exchange, payment infrastructure, internet and software/SaaS company, and the development and opportunity of crypto is also incredibly similar to that of ESG. In particular, COIN has some characteristics that set it apart, they include: 1) it is an integrated model with a dominant exchange arm; 2) it operates in a nascent market and the total addressable market is growing rapidly; and 3) it further enables electronification and reduces lead time. When selecting comps, we tend to pick the companies which possess one or more of the above characteristics. Therefore, we believe MKTX (exchange), PYPL (payment), MSCI (ESG), ABNB (internet) and DOCU (SaaS) are appropriate comps for valuing COIN.

As shown in **Exhibit 11**, consensus expects COIN to grow the top line much faster than the comps (i.e., ~90% CAGR from 2020 to 2022 for COIN versus ~20% for the comps), and its 2021E EBITDA margin is much higher than the comps (i.e., 43% for COIN versus 29% for the comps). That said, given the uncertainty of COIN's revenue and earnings, we believe 16.0x P/S multiple, which is the comp average, is appropriate. We believe that COIN has room for further multiple expansion when/if it can demonstrate sustainable annual revenue growth longer term.

We recognize the uncertainty of trading revenue in any given quarter, and the evolution of the business model could greatly influence the valuation. Therefore, we are prepared to adjust our methodology if we come to believe that it is no longer an appropriate way to value the company.

Exhibit 11. Comparison of Selected Comps

	Coinbase (COIN)	Emerging Tech with Growing TAM	Traditional Exchanges & Alternative Trading Systems	Transaction Solutions
Selected Peers	coinbase	MarketAxess, PayPal, MSCI, airbnb, DocuSign	ASX, Cboe, CME Group, Euronext, HKEX, ICE, London Stock Exchange, Nasdaq, SGX, TMX	ACI, adyen, Bill.com, EPAY, FIS, fiserv, globalpayments, Jack Henry, PayPal, REPAY, Shift4, Square
2020-2022E Revenue CAGR	90.2%	20.2%	8.7%	14.2%
2021E EBITDA Margin	42.0%	29.4%	61.3%	35.0%
P/2021E Revenue	11.7x	21.9x	9.3x	8.1x
EV/2021E Revenue	11.6x	21.5x	9.8x	8.9x
EV/2021E EBITDA	27.6x	40.8x	15.6x	22.1x

Source: FactSet, company reports and Oppenheimer & Co. Inc.

Estimates

We simply estimate that COIN can grow revenue at a CAGR of 77% from 2020 to 2023E as shown in **Exhibit 12**, with the growth primarily driven by: 1) further adoption of bitcoin as store of value by both retail and institutional investors; and 2) increasing use case of other digital assets (e.g. Ethereum, Tether, Cardano, Uniswap, etc.) to expand the cryptoeconomy. That said we recognize the possibility of another "crypto winter" experienced in 2018, and are ready to meaningfully adjust our forecast along the way, similar to what we have done with our traditional exchange coverage such as CME, CBOE and ICE.

With regard to earnings, we estimate that COIN can earn $8.13, $6.63, and $8.08 per share in 2021E, 2022E, and 2023E, respectively, as shown in **Exhibit 12**. Management indicated that the company will keep investing and target to be "break-even on a through-cycle" basis. We recognize that the company has recently been putting up a lot of ads on TV and social media, which could reflect on the expense line item for the rest of this year. That said given the very high incremental margin of trading revenue (~88%), we only view this "guidance" as the floor unless trading volume substantially dries up for good reasons.

Exhibit 12. Opco's Estimates vs. Consensus

in $ millions except for EPS

Fiscal Year	2020	2021E	2022E	2023E
Total Revenue:				
Opco	$1,277	$5,575	$5,977	$7,134
Y/Y	139.3%	336.4%	7.2%	19.4%
Consensus	$1,277	$4,966	$4,522	$5,705
Y/Y	139.3%	288.7%	-8.9%	26.2%
Δ (Opco - Con.) %	0.01%	12.28%	32.18%	25.04%
Adjusted EBITDA:				
Opco	$528	$2,457	$2,089	$2,507
Y/Y	2077.4%	365.0%	-15.0%	20.0%
Consensus	$527	$2,128	$1,175	$1,985
Y/Y	2072.9%	303.7%	-44.8%	68.9%
Δ (Opco - Con.) %	0.21%	15.43%	77.75%	26.31%
EPS:				
Opco		$8.13	$6.63	$8.08
Y/Y			-18.4%	21.8%
Consensus		$6.11	$3.09	$4.23
Y/Y			-49.3%	36.8%
Δ (Opco - Con.) %		33.11%	114.28%	90.88%

Source: Company reports, FactSet and Oppenheimer & Co. Inc.

Company Description

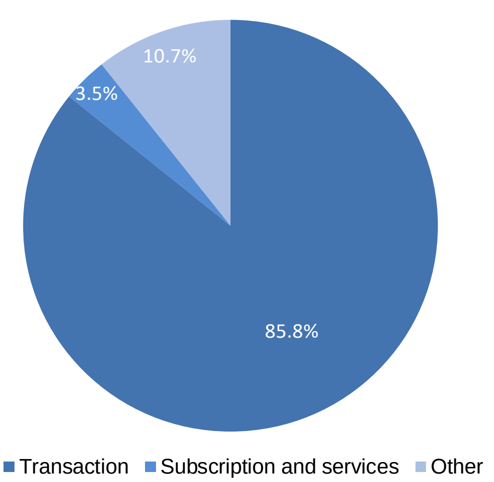
While Coinbase is widely known as a crypto exchange, it is also a leading provider of financial infrastructure and technology to the crypto ecosystem. Inspired by the bitcoin whitepaper published in 2008, Brian Armstrong and Fred Ehrsam co-founded Coinbase in 2012 with the idea that anyone should be able to easily and securely send and receive bitcoin. Since then Coinbase has grown to a company that supports the investments of 45-plus crypto assets and the storage of 90-plus assets in over 100 countries.

At the end of 1Q21 Coinbase had 56M verified users, up from 43M at the end of 2020. The users primarily came from three customer bases: retail, institutions and ecosystem partners. When more retail users and institutions trade crypto and store assets in Coinbase's custody, it enables the expansion of crypto assets. With the increased users and liquidity in the platform, it draws ecosystem partners to connect with the customers to create new products. This flywheel creates a powerful virtuous cycle to the platform.

As shown in **Exhibit 13**, transaction/trading revenue was the largest contributor and represented 86% of total revenue in 2020. Subscription and services revenue came in second at 11% with the rest from other revenue like the sale of crypto. Coinbase defines net revenue (i.e., $1,141M in 2020) as the combination of transaction revenue (i.e., $1,096M in 2020) and subscription and services revenue (i.e., $45M in 2020), and breaks down net revenue into 1) retail, 2) institutional and 3) ecosystem partners for modeling purpose. For example, retail revenue accounted for $1,040M or 92% of net revenue in 2020, while institutional revenue and ecosystem partners revenue only accounted for $74M/~7% and $7M/~1%, respectively.

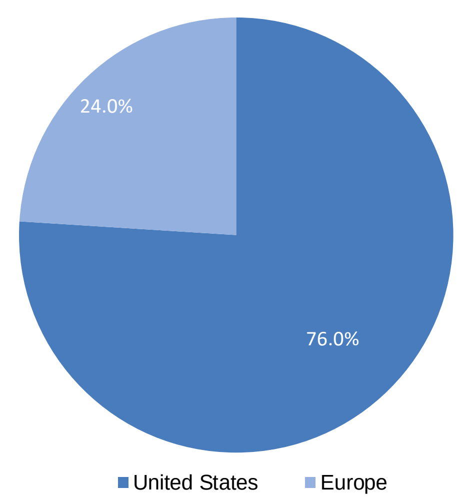
Coinbase serves customers in over 100 countries, with a majority of its total revenue in 2020 coming from customers in the United States (76%) and the rest in Europe (24%) as shown in **Exhibit 14**. The company is expanding globally to facilitate more local access to crypto assets. In terms of factors impacting the decision to enter into a new country, Coinbase typically evaluates market size, local bank partners and regulatory environment.

Exhibit 13. Revenue Mix by Type in 2020



Source: Company Report and Oppenheimer & Co. Inc.

Exhibit 14. Revenue Mix by Geography in 2020



Source: Company Report and Oppenheimer & Co. Inc.

Key Products

COIN has many products catering for different customer segments: retail, institutions and ecosystem partners. **Exhibit 15** below briefly explains the key products for each segment.

Exhibit 15. Key Products for Coinbase Customers

Retail		Institutions		Ecosystem Partners	
Coinbase	The flagship Coinbase app for retail customers to buy and sell cryptocurrencies. It is an easy to use, "one-stop" service providing brokerage, exchange and custody service for individuals	**Coinbase Prime**	It is a turnkey solution which includes custody cold storage solution, multiple execution options and APIs for professional trading institutions like asset managers, hedge funds, VCs, endowments and sovereign wealth funds	**Coinbase Connect**	It allows a Coinbase user to grant a 3rd party application full or partial access to his/her account, without sharing the account's API key or login credentials. E.g. USAA members can connect their Coinbase account to USAA, and view their wallet balances on USAA.com and USAA on mobile
Coinbase Wallet	It is a separate, standalone app that allows individuals to store, or custody, their own crypto. Coinbase Wallet helps users manage their own private keys and store their crypto assets directly on their devices, not with a centralized brokerage or exchange	**Coinbase Custody**	It operates as a standalone, independently-capitalized custody business to Coinbase, and is a fiduciary under NY State Banking Law	**Bison Trails**	It is a blockchain infrastructure platform-as-a-service (PaaS) provider which enables customers to participate in blockchain networks without building and maintaining their own hardware and code bases. It also offers customers the ability to run secure infrastructure on multiple blockchains, without having to develop the technological capabilities in-house
Coinbase Card	It is a Visa debit card that lets users spend any asset in their Coinbase portfolio and earn rewards for each purchase	**Asset Hub**	It allows asset issuers to list new assets, and being introduced on the Coinbase Exchange	**WalletLink**	It is an open protocol that lets users connect their mobile crypto wallets to other decentralized application (Dapp)
		Coinbase Commerce	It is a platform that helps merchants globally to accept cryptocurrency as a payment in a fully decentralized way	**Rosetta**	It is an open standard designed to simplify blockchain deployment and interaction, which standardizes and structures deployment, communication, and data formats but gives extensive flexibility to developers to innovate

Source: Company reports and Oppenheimer & Co. Inc.

Modeling Net Revenue

Despite Coinbase having 1.0M and 2.8M monthly transacting users (MTUs) at the end of 2019 and 2020, respectively, the company used 1.1M and 1.9M average retail MTUs to model out its retail revenue composition as shown in **Exhibit 16**. In 2019 and 2020, not only average retail MTUs had grown, but also monthly average revenue per user had grown from $34 to $45.

Looking ahead of possible scenarios of MTUs and transaction revenue, as illustrated in **Exhibit 17**, we estimate that retail revenue could range from $3.8B to $6.7B, and total revenue could range from $4.6B to $7.5B. It is important to note that we currently assume institutional, ecosystem partners and other revenue only generate ~$800M annually, but with the increasing focus on institutions and ecosystem partners, we won't be surprised to see the contribution from these revenue streams to increase over time.

We certainly don't have the crystal ball when it comes to estimating future revenue and profitability, but our sense is that we are still in the early innings of crypto adoption; therefore, average MTU and monthly average revenue per user are likely to go up longer term when there are more crypto-related products, with the expectation that the financials (and the stock price) can be volatile along the way. All said our experience of covering traditional exchanges such as CME, CBOE and ICE lends us confidence to gauge the long-term value of COIN.

Exhibit 16. Retail Revenue

	Average Retail MTUs		Monthly Average Revenue per User		Retail Revenue	Average Bitcoin Price
2019	1.1M	X	$34	=	$433M	$7.4K
2020	1.9M	X	$45	=	$1.1B	$11.1K
% Change YoY	*84%*		*31%*		*140%*	51%

Source: Company Report and Oppenheimer & Co. Inc.

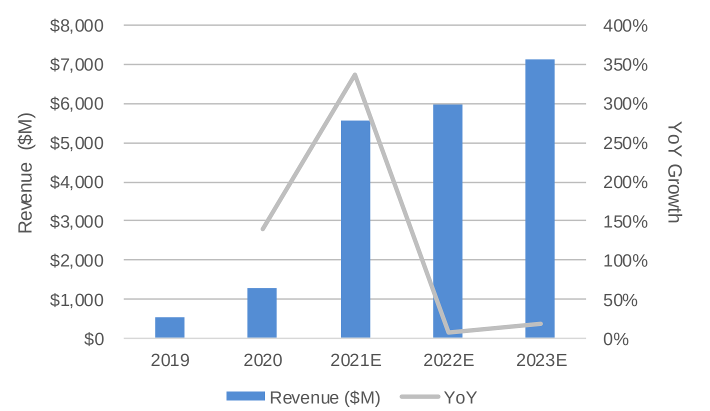
Exhibit 17. 2021 Retail Revenue Possible Scenario

	Avg Retail MTUs		Monthly Avg Rev./User		Retail Revenue		Inst./E.P./ Other Rev.		Est. Total Revenue
High	7.0M	X	$80	=	$6.72B	+	$0.8B	=	$7.52B
Mid	5.5M	X	$80	=	$5.28B	+	$0.8B	=	$6.08B
Low	4.0M	X	$80	=	$3.84B	+	$0.8B	=	$4.64B

Source: Company Report and Oppenheimer & Co. Inc.

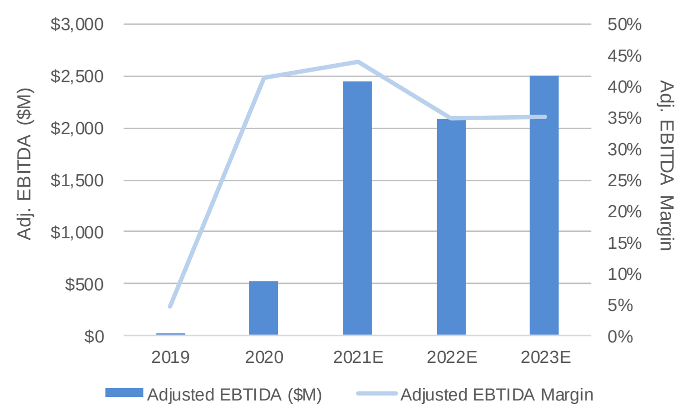
Coinbase revenue grew at 139% from $534M in 2019 to $1.3B in 2020, and we estimate that its revenue could grow to $5.6B in 2021 which implies a growth rate of 336%, as illustrated in **Exhibit 18**. Adjusted EBITDA margin (**Exhibit 19**) is also impressive which grew from 4.5% in 2019 to 41.4% in 2020, and we currently expect it to grow further up to 44.1% in 2021E. While the company targets to be break-even on a through-cycle basis, we expect COIN will continue to generate meaningful earnings given the secular trend of crypto adoption.

Exhibit 18. Revenue Growth



Source: Company Report and Oppenheimer & Co. Inc.

Exhibit 19. Margin Analysis



Source: Company Report and Oppenheimer & Co. Inc.

Fee Analysis

Another way to dissect net transaction revenue is to break it out into 1) transaction volume and 2) transaction fee, which has been under the microscope since day one. **Exhibit 20** compares the retail fee schedule which typically consists of two components: 1) spread and 2) transaction fee. Note this service is offered through its flagship Coinbase app (including Coinbase Pro which caters to professional individual traders) through which COIN provides brokerage, exchange and custody service. Because of its easy-to-use and comprehensive offerings, COIN can charge a higher fee compared to its institutional offering (Coinbase Prime).

Based on our research, Coinbase, Gemini and Binance charge the same 50 bps spread (Gemini calls it convenience fee while Binance calls it instant buy/sell fee). Coinbase and Gemini have the same transaction fee schedule, while Binance takes 10 bps of fee regardless of the value of the transaction. Kraken, another crypto exchange, charges 90 bps for stablecoins and 150 bps for other cryptocurrencies. Voyager, which is a crypto broker, charges 60 bps for the spread but doesn't charge transaction fee.

With regard to the conversation of fee compression and race to the bottom on crypto trading, while we agree that total fees (spread + fees) will come down over time, the impact to revenue is overblown in our view. It is because 1) unlike Robinhood, Charles Schwab and E-Trade, which are brokerage firms, COIN provides integrated services including brokerage, exchange and custody, and charges the fees for a combination of services. 2) Payment for order flow supports zero fees for traditional brokerage but there is no such a thing in crypto. 3) Based on our analysis of the development in traditional assets classes (**Exhibit 21**), while revenue capture comes down, increasing trading volume is more than offset by that pressure to drive revenue growth. Additionally, revenue capture stabilized eventually after years of decline. 4) COIN's strong brand supports a premium fee.

As illustrated in **Exhibits 22** and **23**, despite COIN having experienced fee pressure (down from 64 bps in 4Q19 to 54 bps in 1Q21), which we believe is driven by the expansion into institutional trading, its net transaction revenue actually increased exponentially (from $89M in 4Q19 to $1.8B in 1Q21) due to accelerating crypto adoption and explosive trading volume (from $14B in 4Q19 to $335B in 1Q21). More importantly, we see similar pattern based on our analysis for traditional asset classes. Therefore, it is too early to conclude that fee pressure will drive negative revenue growth. In fact, revenues of traditional asset classes have been growing even though RPCs have been declining for over a decade as discussed earlier.

Exhibit 20. Spot Retail Trading Fee Schedule Comparison

	Coinbase	Gemini	Binance	Kraken	Voyager
Spread / Convenience Fee	50 bps	50 bps	50 bps	Stablecoins: 90 bps Other crypto: 150 bps	30-60 bps
Transaction Fee (value of transaction)					
<$10	$0.99 (or 19.8%E)	$0.99	10 bps	N/A	N/A
$10 - $25	$1.49 (or 8.5%E)	$1.49	10 bps	N/A	N/A
$25 - $50	$1.99 (or 2.7%E)	$1.99	10 bps	N/A	N/A
$50 - $200	$2.99 (or 2.4%E)	$2.99	10 bps	N/A	N/A
$200+	1.49%	1.49%	10 bps	N/A	N/A

	Paypal
Spread	~50 bps
Purchase of sale amount	
$1.00 - $24.99	$0.50
$25.00 - $100.00	2.30%
$100.01 - $200.00	2.00%
$200.01 - $1000.00	1.80%
$1000.01+	1.50%

Note:
1. Gemini charges 50 bps convenience fee
2. Binance charges 50 bps instant buy/sell fee and 10 bps spot trading fee. Offers 25% off w hen using BNB
3. COIN transaction fee percentage is OPCO's estimate by taking the fee dollar amount divided by the mid-point of the transaction value range
4. Paxos provides trading and custody service for Paypal

Source: Company Report, Gemini, Binance, Kraken, Voyager, Paypal website and Oppenheimer & Co. Inc.

Exhibit 21. ADV, Fee and Rev. of ICE US Cash Eq. & CME Derivatives Contracts

	ADV			Average RPC			Est. Monthly Revenue ($M)		
Derivatives	2008	2020	Δ	2008	2020	Δ	2008	2020	Δ
Interest Rates	5,396	8,124	50.6%	$0.529	$0.500	-5.5%	$60.7	$84.2	38.5%
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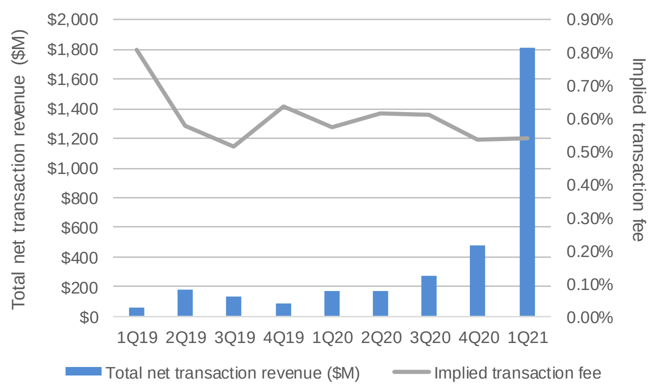
Commodities	815	1,402	72.0%	$1.140	$1.285	12.7%	$19.9	$37.9	91.1%
Metals	223	702	214.8%	$1.772	$1.402	-20.9%	$8.4	$20.6	144.7%
Average			**83.7%**			**-13.9%**			**54.1%**

	ADV			Average RPC			Est. Monthly Revenue ($M)		
Spot	2011	2020	Δ	2011	2020	Δ	2011	2020	Δ
Cash Equities	2,274	2,462	8.3%	$0.038	$0.044	14.4%	$18.2	$22.9	26.0%

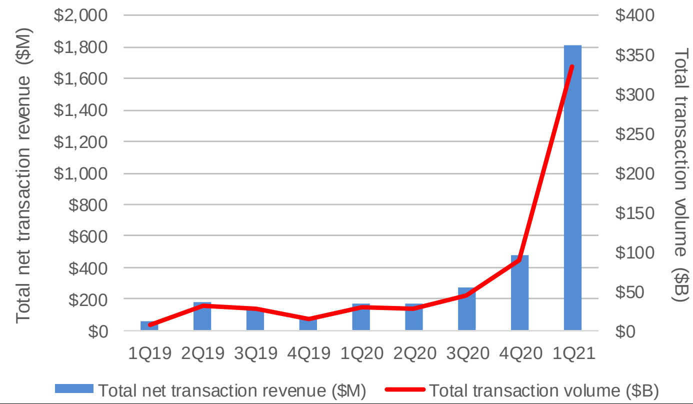
Source: CME, ICE and Oppenheimer & Co. Inc.

Exhibit 22. Fee Rate Trend



Source: Company Report and Oppenheimer & Co. Inc.

Exhibit 23. Transaction Volume Trend



Source: Company Report and Oppenheimer & Co. Inc.

For professional individual traders using Coinbase Pro and institutional customers using Coinbase Prime, COIN charges the fees depending on whether the trader is a maker or taker. Under this structure, traders who place an order at the market place that gets it filled and **takes away the liquidity** will pay a fee between 0.04% and 0.50%. On the other side of the trade, traders who place an order which is not immediately matched by an existing order, and **adds liquidity** to the order book, the traders will pay a fee between 0.00% and 0.50% when the order is matched. Typically makers pay a lower fee (or get a rebate) so that they are incentivized to add liquidity to the pool.

COIN uses an 11-tier pricing structure. The lowest tier is “up to $10K” where both taker fees and maker fees are 0.50%. When the dollar amount of the order increases, the fees decrease. The highest tier is “$1B+” where taker will pay 0.04% while maker will pay nothing. **Exhibit 24** below shows the fee structure.

Exhibit 24. Maker/Taker Fee Structure for Coinbase Pro and Prime

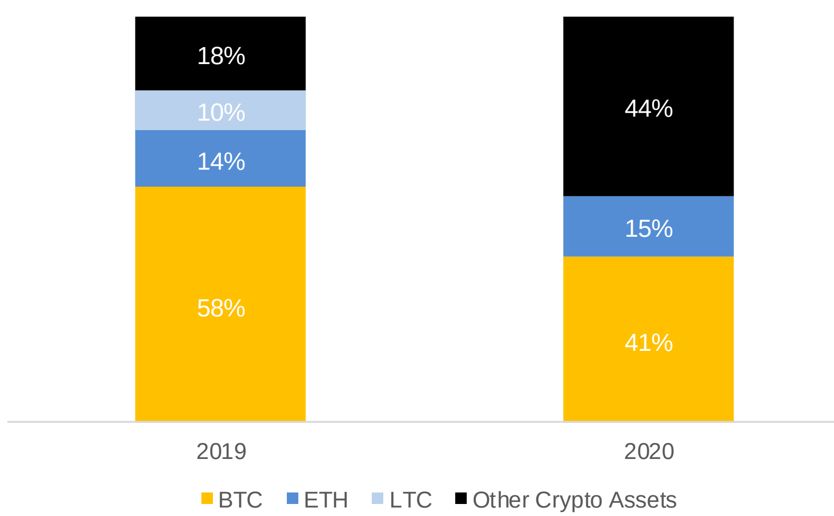
Pricing Tier	Taker Fee	Maker Fee
Up to $10k	0.50%	0.50%
$10k - $50k	0.35%	0.35%
$50k - $100k	0.25%	0.15%
$100k - $1m	0.20%	0.10%
$1m - $10m	0.18%	0.08%
$10m - $50m	0.15%	0.05%
$50m - $100m	0.10%	0.00%
$100m - $300m	0.07%	0.00%
$300m - $500m	0.05%	0.00%
$500m - $1b	0.04%	0.00%
$1b+	0.04%	0.00%

Source: Company reports and Oppenheimer & Co. Inc.

In terms of crypto concentration, a significant portion of trading volume, which is a good proxy for the composition of transaction fee revenue, has been driven by Bitcoin and Ethereum. As shown in **Exhibit 25**, BTC, ETC and other crypto assets accounted for 58%, 14% and 18% of total trading volume (and 60%, 11% and 21% of transaction revenue) in 2019, and the percentage changed to 41%, 15% and 44% (and 44%, 12% and 44% of transaction revenue) in 2020.

We believe that when more people view BTC as a form of store of value, more people tend to keep BTC and trade other cryptocurrencies. Additionally, when more other crypto assets are introduced to the platform there are more options for people to trade; therefore, it is a natural and healthy development for COIN from diversification point of view.

Exhibit 25. Trading Volume Concentration



Source: Company reports and Oppenheimer & Co. Inc.

Subscription and Services Revenue

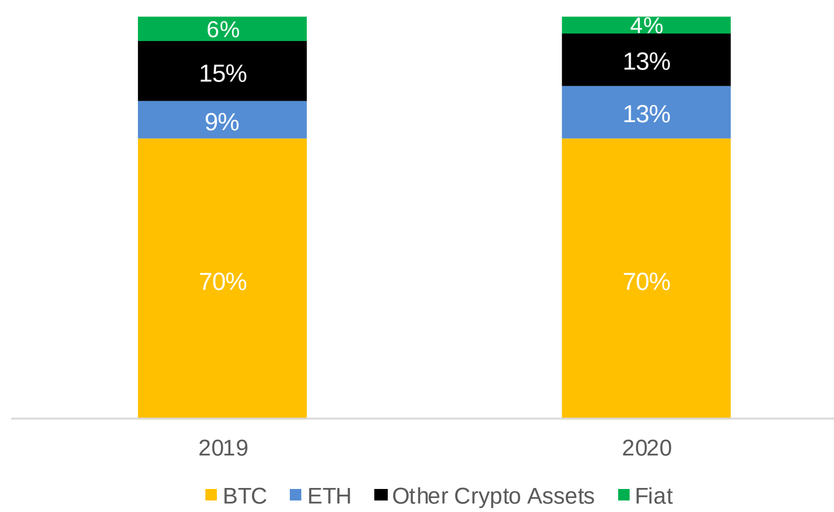
Since late 2018, COIN has focused on launching a suite of subscription products and services, such as custody (Store), staking (Stake), and credit (Borrow & Lend). These products and services help diversify away from transaction revenue which is still highly correlated with volatility and price of crypto such as bitcoin. In 2020, subscription and services revenue contributed ~11% of total revenue to COIN.

For most of these products and services, COIN generates revenue based on a *percentage of the assets* on its platform participating in the product or service. Therefore, one of COIN's goals is to grow its Assets on Platform because it will likely drive growth in subscription and services revenue. At the end of 1Q21, COIN had $223B of Assets on Platform, including $122B from institutions. It was up from $90B at the end of 2020.

The value of crypto assets on COIN's platform has increased from 4.5% of the total market capitalization of crypto assets in 2018, to 8.3% in 2019 and 11.1% in 2020. At the end of 1Q20, we estimate that it went further up to 11.7%. The company expects that, as it continues to expand its product suite, the quantity of crypto assets it held will increase gradually.

In terms of the concentration of assets, as shown in **Exhibit 26** bitcoin still comprised the majority of total assets held on platform at 70% in both 2019 and 2020. Ethereum came in second with 9% and 13% in 2019 and 2020, with the balance coming from other crypto assets and fiat currency. We expect that, as more projects are getting attention and demonstrating good use cases, the relative importance of other cryptocurrencies such as ethereum will increase over time so that it can reduce the reliance on bitcoin.

Exhibit 26. Assets on Platform Concentration



Source: Company reports and Oppenheimer & Co. Inc.

COIN has an angle to integrate itself to the crypto ecosystem. Currently the company directly integrates with 15-plus blockchain protocols and supports 90-plus crypto assets for trading or custody. Because of COIN's relatively broad offerings compared to its competitors, its retail users are able to engage with multiple products and services. COIN disclosed that, on average, 21% of its retail users who invested with COIN also engaged with at least one non-investing product per quarter in 2020. More importantly COIN generated 90% more average net revenue per retail user for these 21% of customers compared to other (i.e., the remaining 79%) retail users.

While revenue from its ecosystem partner products is still immaterial, in the future COIN expects to grow this revenue stream from educational campaign (Distribute), analytics (Build) and payments (Pay). The revenue model of these products will be based on a *fixed fee and/or usage* of the product or service.

Other Revenue

COIN generated a small amount of revenue (3.5% of total in 2020) from other revenue, which includes sale of crypto assets. Despite COIN being an exchange, it sometimes acts as a principal in the transaction when: 1) COIN wants to maintain customers' trade execution and processing times during unanticipated system disruptions (a more often scenario); or 2) the orders don't meet the minimum trade size for execution. COIN records the total value of the sale as revenue and the cost of the crypto asset in other operating expense.

Competitive Dynamics

The cryptocurrency exchange market is global, fragmented and evolving. Given that crypto offers a low cost and easily accessible alternative to current financial system for money transfer and payment globally, it is an attractive option for consumers to transact in crypto such as bitcoin. Additionally, crypto can serve as an inflation hedge in countries experiencing skyrocket inflation. When citizens lose confidence in local currency, they would rather use bitcoin as store of value. The combination of these two incentivizes people to use the bitcoin rail for cross-border transaction (e.g. sending money to support family in another country) instead of using traditional payment rail.

Given that it is not difficult to set up a new crypto exchange online (but difficult to have a deep liquidity pool), it is hard to estimate the exact number of existing exchanges. CoinMarketCap currently tracks 300-plus crypto exchanges in the world including the spot and derivatives markets, as well as decentralized exchange (DEX). There are some industry researches suggesting that the number could be above 500. In summary, this market is highly fragmented.

Crypto market is rapidly evolving, and many players have different businesses such as exchange, broker, custody, payments and asset management vertically integrated. We believe that this trend is driven by several key factors. First, there weren't many pure play companies specializing in a particular area when the industry just started to develop. Most of the time these companies had to build the whole value chain from front end to back end to support their services.

Second, having different verticals under one roof enables innovation for new product launches and improves speed to market. For example, when an exchange wants to add a new asset class (e.g. a new crypto) for trading, it needs to change the coding on front end (e.g. web interface) to accept this new asset class, and back end (e.g. custody) to store this asset. Vertical integration enables the company to control its own destiny.

Third, a wide range of companies not only diversify the revenue stream in this industry, but also put themselves in an "open-ear" position to detect the rapidly changing competitive dynamics. Keep in mind that crypto companies can leverage its advantage of crypto infrastructure (such as T+0 settlement time) by introducing traditional products (e.g. adding stock trading) that disrupt and compete with existing providers (e.g. Charles Schwab and E-Trade), or launch new products tailored to the cryptoeconomy. Overall this industry is rapidly evolving.

The major competitors of Coinbase are crypto-focused companies such as Binance, Gemini and Kraken. These companies also have different segments vertically integrated, and compete for the trading volume with Coinbase. Coinbase also competes with traditional financial technology and brokerage firms such as Robinhood, Square and PayPal. That said, these firms tend to treat crypto trading as a value-added service, and are more focused on allowing users to buy and sell a few crypto currencies. For example, Paypal allows the buy, sell and hold for Bitcoin, Ethereum, Litecoin and Bitcoin Cash, while Robinhood supports seven crypto currencies (Ethereum Classic, Ethereum, Bitcoin SV, Bitcoin Cash, Bitcoin, Dogecoin and Litecoin) and Square's Cash App only supports Bitcoin. Coinbase, by comparison, supports 45-plus crypto assets and enables customers to interact with broader cryptoeconomy such as staking, borrowing and governance. Other Coinbase competitors in the whole ecosystem include Fidelity Digital Assets and BNY Mellon on custody, Voyager on brokerage and Bakkt on payment.

Key Regulations

Coinbase devotes meaningful resources to ensure compliance with global regulatory framework on traditional regulations in consumer protection, money transmission and payments, as well as on emerging regulations related to digital assets and crypto. For example Coinbase is a founding member of the Crypto Rating Council, a member-owned organization whose purpose is to assess whether the development, issuance, and use of crypto asset have characteristics that could violate US laws.

That said Coinbase is subject to a global and rapidly evolving regulatory environment which can create both headline and fundamental risks to the company. These laws and regulations could evolve and may be interpreted differently in different jurisdiction. Currently Coinbase is not regulated as a bank by OCC, a CFTC-regulated futures commission merchant, or an SEC-regulated national securities exchange / alternative trading system. Key regulations include:

1. AML and counter-terrorist financing laws under FinCEN;
2. BitLicense and custody (Coinbase Custody Trust Company) related regulations from NYDFS;
3. General regulations applicable to the European financial services industry;
4. Compliance of trade sanctions;
5. General broker-dealer (Coinbase Capital Markets) regulations governed by FINRA;
6. Commodities trading under CFTC given that bitcoin and some other crypto assets are classified as “commodity”;
7. Privacy and protection of user data;
8. Consumer protection like unfair and deceptive practices governed by FTC and CFPB;
9. Lending law under Truth-in-Lending Act, given that Bitcoin originates secured consumer and commercial loans in certain states in the US;
10. Interchange fees related rules;
11. Operating rules and agreements under the National Automated Clearing House Association (NACHA) because Coinbase is an issuer of Coinbase Card.

Estimated Fully Diluted and Day 1 Shares Outstanding

Based on the latest S-1 and company presentation, Coinbase had 196.8M shares outstanding as of March 15, 2021. On a fully diluted basis, the share count will increase to 266.3M. Class A Options 2019 plan (37.2M), Class A & B Options 2013 plan (26.0M) and Class A RSUs (5.4M) contributes the most and will increase total shares outstanding by 68.6M as shown in **Exhibit 27**. On the first day of trading, the share count had increased to 221.2M (from 196.8M) primarily driven by 25.5M of shares from vested options, with the walk illustrated in **Exhibit 28**.

Exhibit 27. Estimated Build-Up of Fully Diluted Shares

Fully diluted shares	Total Shares (M)	Weighted Avg. Exercise Price ($)
Shares Outstanding (Class A and Class B as of March 15, 2021	196.760	
Class A RSUs	5.374	
Class A & B Options 2013 Plan	25.992	$5.26
Class A Options 2019 Plan	37.231	$21.54
Acquisition of Tagomi Holdings Inc. in July 2020	0.032	$5.31
Acquisition of Bison Trails Co. Inc. in Feb 2021	0.470	$3.45
Warrant to Purchase Class B	0.408	$1.01
Warrant to Purchase Class A	0.004	$5.26
Fully diluted shares (assumed cash exercise)	266.271	

Source: Company Reports and Oppenheimer & Co. Inc.

Exhibit 28. Estimated Shares Available for Day 1 Trading

Shares available for Day 1 trading	Total Shares (M)	Weighted Avg. Exercise Price ($)
Shares Outstanding (Class A and Class B as of March 15, 2021	196.760	
Vested Options	25.504	$6.41
Class A subject to repurchase (as of 3/15)	-0.931	
Class B subject to repurchase (as of 3/15)	-0.158	
Shares available for Day 1 trading	221.175	

Source: Company Reports and Oppenheimer & Co. Inc.

Balance Sheet

Strong Balance Sheet

As of FY2020, COIN had $1.1B in cash and cash equivalents, $49M in USDC and $316M in other crypto assets held on the balance sheet. The company had not taken on any debt, but it had $271M in crypto assets borrowing and $108M in operating lease. The company had primarily funded its operations through equity financings and revenue. In 2020, COIN generated a net income of $322M and an adjusted EBITDA margin of ~41%. Near term we expect the company will continue to reinvest its profit back to the business in area such as technology, personnel, marketing and acquisitions. Overall the strong balance sheet supports management's efforts to continue to build out the platform through product R&D, ecosystem partners and M&A.

Growth Is the Priority

We believe that management will prioritize growth given the vast opportunity in the cryptoeconomy and offer new products. The company is likely to increase its outreach to registered users which don't actively trade in order to grow the MTU. Given the nascent industry and room for growth, we expect incumbents and new entrants to aggressively compete in the market and should push management to invest more into the business to drive higher retention of the customers.

Top Holders and Insider Ownership

Exhibit 29 below illustrates the percentage ownership of the company's common stock. Investors should be aware that it is only based on the company's shares *before the direct listing* of 26,501,374 shares of Class A common stock and 170,258,748 shares of Class B common stock outstanding as of March 15, 2021. It is important to note that holders of Class A common stock are entitled to *one* vote per share, while holders of Class B common stock are entitled to *twenty* votes per share. As of 05/05/21, co-founder, Chairman and CEO Brian Armstrong had 21.5% of total voting power which was the largest portion, and Andreessen Horowitz controlled 14.1% of voting right which was the second largest holder.

Exhibit 29. Top Holders and Insider Ownership

	Class A		Class B		% Of Total
Shareholders	Position	% OS	Position	% OS	Voting Power
Brian Armstrong	2,753,924	9.4%	36,851,833	21.6%	21.5%
Surojit Chatterjee	2,002,036	7.0%	—	—	—
Paul Grewal	915,331	3.3%	—	—	—
Marc Andreessen	5,516,037	20.8%	23,961,498	14.1%	14.1%
Frederick Ernest Ehrsam III	2,570,459	9.7%	15,114,503	8.9%	8.9%
Kathryn Haun	181,000	—	286,854	—	—
Fred Wilson	—	—	13,902,324	8.2%	8.1%
All executive officers and directors as a group (11 persons)	15,998,205	46.8%	91,947,012	53.5%	53.5%
Other 5% Stockholders:					
Entities affiliated with Andreessen Horowitz	5,516,037	20.8%	23,961,498	14.1%	14.1%
Entities affiliated with Paradigm	2,570,459	9.7%	—	—	—
Entities affiliated with Ribbit Capital	—	—	11,995,949	7.0%	7.0%
Tiger Global Private Investment Partners XI, L.P.	2,624,880	9.9%	—	—	—
Entities affiliated with Union Square Ventures	—	—	13,902,324	8.2%	8.1%
Viserion Investment Pte Ltd.	1,381,518	5.2%	—	—	—
Other Registered Stockholders:					
Non-Executive Officer and Non-Director Current and Former Service Providers	17,111,799	42.9%	15,991,864	9.0%	9.4%
All Other Registered Stockholders	4,224,755	15.9%	3,870,923	2.3%	2.4%

Source: Company reports and Oppenheimer & Co. Inc.

Risk Factors

Declining Prices and Volatility of Crypto

COIN generates a vast majority of revenue from transactions, which is correlated with the price of bitcoin and the volatility of crypto assets. For example, a period of declining bitcoin price and/or low crypto price volatility could negatively impact the sentiment and trading volume of crypto. Additionally, the reason of the crypto price volatility can be obscure and the magnitude can be outsized, which could result in considerable volatility in COIN shares. Moreover COIN holds corporate crypto assets, including assets received from airdrops or forks; therefore, crypto price decline may trigger an impairment charge on crypto assets holding. Overall some investors may not feel comfortable owning the shares with lack of clarity in the volatility and substantial share price movement.

AML Risk

If there is an increasing activity, or increasing perception of activity that crypto is being used for money laundering or terrorist financing, and there is no recognizable way to minimize these illicit actions, the support of crypto may decline or the transaction of crypto may be completely banned in regulated entities (e.g. banks). It could slow down the adoption of crypto and the development of the cryptoeconomy.

Revenue Concentration in Bitcoin and Ethereum

COIN derives a significant portion of transaction volumes and revenue from two cryptocurrencies: bitcoin and ethereum. In 2020, bitcoin and ethereum represented ~41% and ~15% of trading volume, and ~44% and ~12% of the transaction revenue, respectively. COIN would be negatively impacted if there is a price decline in bitcoin and ethereum, a reduction in mining rewards and 51% attacks. That said COIN expects greater diversification of trading volume and transaction revenue by crypto asset going forward. It is because the company continues to expand the number of assets available and diversify away from trading-related revenue through new product launches.

Technology Risk in Underlying Network

Crypto assets were only introduced in 2008 and remain in the early stages of development. Further growth and development of crypto assets and their underlying networks represent an evolving paradigm which is hard to evaluate. For example, many crypto networks are in the process of implementing software upgrades and change in protocols, which could introduce bugs and security risks. Several large networks such as Bitcoin and Ethereum are developing new features to address fundamental issues like speed, scalability, and energy usage. If these issues are not successfully addressed, it could negatively impact the adoption of crypto, scale of the ecosystem and trust in the networks.

Regulation

On top of existing laws and regulations, law makers and regulators in the United States and in other countries may adopt new laws and regulations, or have new interpretations of existing laws and regulations, which may negatively impact the development of digital assets. It could impact the company’s marketing and operating exiting products, as well as what products the company can introduce in the future. Additionally, new regulations (or new interpretations of regulations) can add incremental compliance costs (such as new license, KYC requirement and etc.) for the company, or limit revenue opportunity that the company can explore. For example, in December 2020, FinCEN released a proposed rule that would require Coinbase to collect personal information from the owners of self-custodied wallets that transfer cryptocurrencies to/from Coinbase, and report certain transactions to the federal government. Another example is the recent extension of AML requirements to certain crypto-related activities by the E.U. Fifth Money Laundering Directive. It has increased the regulatory compliance burden, such as the fragmented approach and different licensing regimes in different EU members, for Coinbase’s business in Europe.

New Entrants

Coinbase operates in a competitive landscape, and the market in which it competes is rapidly evolving and subject to changing technology/customer needs. Given that the players in this space can easily set up their own exchange, unlike traditional exchanges which are highly regulated, new entrants with appealing products can come in anytime. Increased competition may reduce user/AUM/trading volume growth, resulting in higher cost and lower margins for the business. If COIN fails to develop and sustain the competitive advantages, results of the operations and financial position may be negatively affected. All said, deep liquidity pool, brand awareness, trust, regulatory compliance and scale remain key competitive advantages of Coinbase.

Key Management Biographies

Brian Armstrong: Co-founder, Chairman and Chief Executive Officer

Mr. Armstrong has served as Chief Executive Officer and a member of board of directors since the company's inception in May 2012 and as Chairman of the Board of Directors since February 2021. Before that, Mr. Armstrong served as a software engineer at Airbnb from May 2011 to June 2012. From August 2003 to May 2012, Mr. Armstrong served as the founder and Chief Executive Officer of Universitytutor.com. Mr. Armstrong also previously served as a consultant for the enterprise risk management division at Deloitte & Touche LLP from July 2005 to November 2005. In January 2020, Mr. Armstrong founded ResearchHub Technologies where he currently serves as Chief Executive Officer and a member of the board of directors. Mr. Armstrong holds a B.A. in Computer Science and Economics and an M.S. in Computer Science from Rice University.

Surojit Chatterjee: Chief Product Officer

Mr. Chatterjee has served as Chief Product Officer since February 2020. From February 2017 to February 2020, Mr. Chatterjee served as Vice President of Product Management for Google Shopping at Google LLC. From October 2015 to February 2017, Mr. Chatterjee served as Senior Vice President and Head of Product at Flipkart Internet Private Limited. Prior to Flipkart, Mr. Chatterjee held various positions at Google and Symantec Corporation. Mr. Chatterjee holds a B.A. Tech in Computer Science and Engineering from the Indian Institute of Technology, Kharagpur, India, an M.S. in Computer Science from the State University of New York at Buffalo, and an M.B.A from the MIT Sloan School of Management.

Emilie Choi: Chief Operating Officer

Ms. Choi has served as Chief Operating Officer since June 2019, and President since November 2020. Ms. Choi previously served as Vice President of Business, Data and International, from March 2018 to June 2019. From December 2009 to March 2018, Ms. Choi served as the Vice President and Head of Corporate Development for LinkedIn Corporation. From August 2007 to December 2009, Ms. Choi served in various positions at Warner Bros. Entertainment Inc. Ms. Choi currently serves as a member of the board of directors of Naspers Limited, Prosus N.V., and ZipRecruiter. Ms. Choi holds a B.A. in Economics from the Johns Hopkins University and an M.B.A from the Wharton School at the University of Pennsylvania.

Paul Grewal: Chief Legal Officer

Mr. Grewal serves as Chief Legal Officer since August 2020. Prior to that, Mr. Grewal served as Vice President and Deputy General Counsel of Facebook from June 2016 to August 2020. From December 2010 to June 2016, Mr. Grewal served as a U.S. Magistrate Judge for the U.S. District Court of the Northern District of California. Mr. Grewal was previously a partner at Howrey LLP and served as a Judicial Law Clerk for the U.S. Court of Appeals for the Federal Circuit and the U.S. District Court for the Northern District of Ohio. Mr. Grewal currently serves as a member of the board of directors of Epiq Systems. Mr. Grewal holds a S.B. in Civil and Environmental Engineering from the Massachusetts Institute of Technology and a J.D. from the University of Chicago Law School.

Alesia J. Haas: Chief Financial Officer

Ms. Hass serves as Chief Financial Officer since April 2018. Prior to joining Coinbase, Ms. Haas served as the Chief Financial Officer for Sculptor Capital Management, Inc. from December 2016 to April 2018. Prior to that, Ms. Haas served in various leadership positions at OneWest Bank, N.A. from March 2009 until shortly after its acquisition by CIT Group Inc. in December 2015, including most recently as its Chief Financial Officer from January 2013 until the acquisition. Ms. Haas currently serves as a member of the board of directors of ANGI Homeservices Inc., and previously served as a member of the board of directors of Sears Holding Corp., from February 2016 to December 2016. Ms. Haas holds a B.S. in Business Administration from California Polytechnic State University, San Luis Obispo.

Stock prices of other companies mentioned in this report as of 05/10/2021

Company Name	Ticker	Price	Rating
Bit Digital, Inc.	BTBT	11.86	Not Covered
Canaan Inc. Sponsored ADR Class A	CAN	11.63	Not Covered
Charles Schwab Corporation	SCHW	71.75	Not Covered
Diginex Limited	EQOS	5.63	Not Covered
Ebang International Holdings, Inc. Class A	EBON	3.45	Not Covered
FinTech Acquisition Corp. V Class A	FTCV	10.88	Not Covered
Galaxy Digital Holdings Ltd.	GLXY-TSE	32.72	Not Covered
Interactive Brokers Group, Inc. Class A	IBKR	69.60	Not Covered
Marathon Digital Holdings Inc	MARA	31.33	Not Covered
MarketAxess Holdings Inc.	MKTX	437.17	Not Covered
MicroStrategy Incorporated Class A	MSTR	620.46	Not Covered
Riot Blockchain Inc	RIOT	33.39	Not Covered
Signature Bank	SBNY	255.06	Not Covered
Silvergate Capital Corp. Class A	SI	93.26	Not Covered
Voyager Digital Ltd.	VYGVF	21.03	Not Covered
VPC Impact Acquisition Holdings Class A	VIH	10.99	Not Covered

Coinbase Inc. (NASDAQ: COIN)

Earnings Model
In millions of US$, except per share data and where otherwise specified
Fiscal Year End 12/31

						2020				2021E				2022E			
Fiscal Year	**2019**	**2020**	**2021E**	**2022E**	**2023E**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1E**	**Q2E**	**Q3E**	**Q4E**	**Q1E**	**Q2E**	**Q3E**	**Q4E**
Transaction net revenue	463	1,096	5,071	5,351	6,403	172	172	276	476	1,756	1,155	1,079	1,081	1,138	1,300	1,457	1,455
Subscription and services revenue	20	45	294	398	484	7	6	11	21	48	75	84	88	92	97	102	107
Other revenue	51	136	210	228	246	12	8	29	88	51	52	53	54	55	56	57	59
Total Revenue	**534**	**1,277**	**5,575**	**5,977**	**7,134**	**191**	**186**	**315**	**585**	**1,854**	**1,282**	**1,216**	**1,223**	**1,286**	**1,453**	**1,617**	**1,621**
Transaction expense	82	136	710	749	896	25	23	37	50	246	162	151	151	159	182	204	204
Technology and development	185	272	716	910	1,089	47	61	73	90	176	173	183	184	193	221	248	247
Sales and marketing	24	57	626	803	960	10	11	12	24	140	162	162	162	171	195	219	218
General and administrative	232	280	749	1,070	1,281	59	52	71	98	176	185	194	195	228	260	291	291
Restructuring	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other operating expense	46	125	495	535	579	10	(3)	20	97	120	122	125	127	130	132	135	138
Total Expenses	**580**	**869**	**3,296**	**4,067**	**4,806**	**152**	**144**	**214**	**359**	**857**	**804**	**815**	**819**	**881**	**990**	**1,097**	**1,098**
Operating Income	**(46)**	**409**	**2,279**	**1,910**	**2,328**	**39**	**42**	**102**	**227**	**997**	**478**	**400**	**404**	**405**	**463**	**520**	**523**
Other income (expense)	(0)	(0)	(6)	(7)	(7)	4	3	(1)	(6)	(0)	(1)	(2)	(2)	(1)	(2)	(2)	(2)
Income before income taxes	**(45)**	**409**	**2,285**	**1,917**	**2,335**	**35**	**39**	**103**	**233**	**997**	**479**	**402**	**406**	**406**	**465**	**522**	**524**
Income tax provision	(15)	87	537	450	549	3	7	21	56	234	113	95	95	95	109	123	123
Income tax rate	33.1%	21.2%	23.5%	23.5%	23.5%	8.4%	16.9%	20.9%	24.1%	23.5%	23.5%	23.5%	23.5%	23.5%	23.5%	23.5%	23.5%
Net Income (GAAP)	**(30)**	**322**	**1,748**	**1,466**	**1,786**	**32**	**32**	**81**	**177**	**763**	**367**	**308**	**311**	**311**	**355**	**399**	**401**
Diluted shares outstanding			215.1	221.2	221.2					196.8	221.2	221.2	221.2	221.2	221.2	221.2	221.2
Adj. Diluted EPS	**n.a.**	**n.a.**	**8.13**	**6.63**	**8.08**					**$3.88**	**$1.66**	**$1.39**	**$1.41**	**$1.40**	**$1.61**	**$1.80**	**$1.81**
Dividend	-	-	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reconcilation to Non-GAAP																	
GAAP Net Income	(30)	322	1,748	1,466	1,786	32	32	81	177	763	367	308	311	311	355	399	401
Adjusted EBITDA	**24**	**528**	**2,457**	**2,089**	**2,507**	**56**	**61**	**123**	**288**	**1,040**	**522**	**445**	**449**	**449**	**507**	**565**	**567**
Key Metrics																	
Transaction expense as % of Net revenue	17.7%	12.4%	14.0%	14.0%	14.0%	14.8%	13.6%	13.3%	10.5%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%
Technology expense as % of Net revenue	40.0%	24.8%	14.1%	17.0%	17.0%	27.4%	35.4%	26.6%	19.0%	10.0%	15.0%	17.0%	17.0%	17.0%	17.0%	17.0%	17.0%
Sales & marketing expense as % of Net revenue	5.2%	5.2%	12.3%	15.0%	15.0%	5.8%	6.6%	4.3%	4.9%	8.0%	14.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
General & admin expense as % of Net revenue	50.1%	25.5%	14.8%	20.0%	20.0%	34.3%	30.2%	25.9%	20.5%	10.0%	16.0%	18.0%	18.0%	20.0%	20.0%	20.0%	20.0%
GAAP Operating margin	-8.6%	32.0%	40.9%	32.0%	32.6%	20.3%	22.6%	32.2%	38.7%	53.8%	37.3%	32.9%	33.0%	31.5%	31.8%	32.1%	32.2%
Adj. EBITDA margin	4.5%	41.4%	44.1%	34.9%	35.1%	29.5%	32.8%	39.1%	49.2%	56.1%	40.7%	36.6%	36.7%	34.9%	34.9%	34.9%	35.0%
YoY %																	
Transaction net revenue		136.8%	362.6%	5.5%	19.7%	93.2%	-0.1%	60.5%	72.7%	268.6%	-34.2%	-6.6%	0.2%	5.3%	14.2%	12.1%	-0.1%
Subscription and services revenue		125.6%	554.3%	35.3%	21.6%	34.3%	-8.8%	66.4%	92.2%	130.1%	57.6%	11.8%	5.0%	5.0%	5.0%	5.0%	5.0%
Other revenue		168.4%	54.2%	8.2%	8.2%	191.5%	-30.3%	256.4%	206.8%	-42.1%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Total Revenue		139.3%	336.4%	7.2%	19.4%	94.0%	-2.2%	69.2%	85.5%	216.9%	-30.9%	-5.2%	0.6%	5.1%	13.0%	11.3%	0.3%
Total Operating expenses		49.9%	279.5%	23.4%	18.2%	9.2%	-6.8%	48.9%	152.5%	464.7%	457.2%	281.2%	128.5%	2.8%	23.2%	34.6%	34.1%
GAAP Operating Income		-993.2%	457.4%	-16.2%	21.9%	-153.1%	-24.9%	581.9%	-618.6%	2471.2%	1036.4%	294.4%	78.3%	-59.4%	-3.2%	29.8%	29.4%
GAAP Net Income		-1160.7%	442.3%	-16.1%	21.8%	-165.9%	-15.1%	916.1%	-734.3%	2285.6%	1036.6%	278.7%	75.8%	-59.3%	-3.1%	29.6%	29.1%
Adj. EBITDA		2077.4%	365.0%	-15.0%	20.0%	-196.4%	-20.8%	437.7%	-1739.2%	1748.8%	753.4%	261.5%	56.2%	-56.8%	-2.8%	26.7%	26.3%

Source: Company reports, Oppenheimer & Co. Inc. estimates

Coinbase Inc. (NASDAQ: COIN)

Balance Sheet
In millions of US$, except per share data and where otherwise specified
Fiscal Year End 12/31

Capital Returns																	
No. of Share Repurchases (millions)			0.00	0.00	0.00					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Average Price of Repurchases			$300	$300	$300					$300	$300.0	$300.0	$300.0	$300.0	$300.0	$300	$300
Total Share Repurchases ($)			$0	$0	$0					$0	$0	$0	$0	$0	$0	$0	$0
Dividend Payout Ratio			0	0	0					0	0	0	0	0	0	0	0
Total Payout Ratio			0	0	0					0	0	0	0	0	0	0	0

						2020				2021E				2022E			
Fiscal	**2019**	**2020**	**2021E**	**2022E**	**2023E**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1E**	**Q2E**	**Q3E**	**Q4E**	**Q1E**	**Q2E**	**Q3E**	**Q4E**
Cash and cash equivalents	1,784	4,856	6,449	7,914	9,739				4,856	5,173	5,749	6,109	6,449	6,771	7,105	7,484	7,914
Cash and cash equivalents	549	1,062	-	-	-				1,062	-	-	-	-	-	-	-	-
Restricted cash	34	31	-	-	-				31	-	-	-	-	-	-	-	-
Customer custodial funds	1,201	3,763	-	-	-				3,763	-	-	-	-	-	-	-	-
USDC	88	49	49	49	49				49	49	49	49	49	49	49	49	49
Accounts receivable, net of allowance	17	189	397	526	615				189	602	416	395	397	418	472	525	526
Income tax receivable	74	-	-	-	-				-	-	-	-	-	-	-	-	-
Prepaid expenses and other current assets	22	40	40	40	40				40	40	40	40	40	40	40	40	40
Current Assets	**1,987**	**5,134**	**6,934**	**8,529**	**10,443**				**5,134**	**5,864**	**6,254**	**6,592**	**6,934**	**7,277**	**7,665**	**8,097**	**8,529**
Crypto assets held	34	316	316	316	316				316	316	316	316	316	316	316	316	316
Lease right-of-use assets	123	101	101	101	101				101	101	101	101	101	101	101	101	101
Property and equipment, net	47	49	58	67	76				49	52	54	56	58	61	63	65	67
Goodwill	55	77	77	77	77				77	77	77	77	77	77	77	77	77
Intangible assets, net	70	61	61	61	61				61	61	61	61	61	61	61	61	61
Other non-current assets	76	117	117	117	117				117	117	117	117	117	117	117	117	117
Total Assets	**2,392**	**5,855**	**7,665**	**9,269**	**11,192**				**5,855**	**6,587**	**6,980**	**7,321**	**7,665**	**8,009**	**8,400**	**8,834**	**9,269**
Custodial funds due to customers	1,107	3,849	3,849	3,849	3,849				3,849	3,849	3,849	3,849	3,849	3,849	3,849	3,849	3,849
Accounts payable and accrued expenses	45	85	13	17	20				85	21	14	13	13	14	16	17	17
Crypto asset borrowings	-	271	271	271	271				271	271	271	271	271	271	271	271	271
Lease liabilities, current	24	25	25	25	25				25	25	25	25	25	25	25	25	25
Other current liabilities	47	16	16	16	16				16	16	16	16	16	16	16	16	16
Lease liabilities, non-current	107	83	83	83	83				83	83	83	83	83	83	83	83	83
Total Liabilities	**1,330**	**4,329**	**4,257**	**4,262**	**4,265**				**4,329**	**4,265**	**4,258**	**4,257**	**4,257**	**4,258**	**4,260**	**4,262**	**4,262**
Total SE	**1,062**	**1,526**	**3,408**	**5,007**	**6,927**				**1,526**	**2,322**	**2,722**	**3,063**	**3,408**	**3,752**	**4,140**	**4,573**	**5,007**
Total Liabilities & SE	2,392	5,855	7,665	9,269	11,192				**5,855**	**6,587**	**6,980**	**7,321**	**7,665**	**8,009**	**8,400**	**8,834**	**9,269**
Check	-	-	-	-	-				-	-	-	-	-	-	-	-	-

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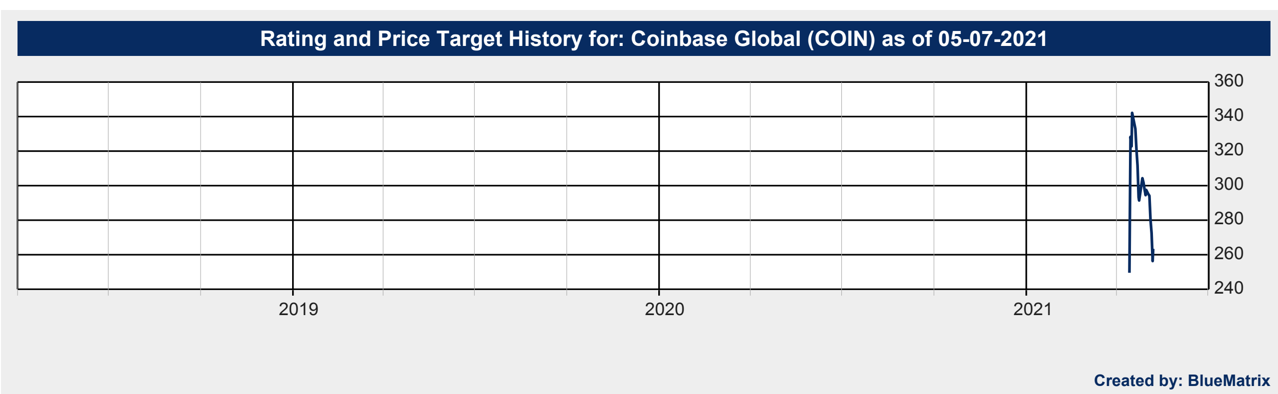
CME Group Inc. (CME - NASDAQ, $202.92, PERFORM)
CBOE Global Markets (CBOE - BZX, $108.10, OUTPERFORM)
Intercontinental Exchange (ICE - NYSE, $114.81, PERFORM)
Nasdaq Inc. (NDAQ - NASDAQ, $164.56, OUTPERFORM)
Tesla, Inc. (TSLA - NASDAQ, $672.37, OUTPERFORM)
Square Inc. (SQ - NYSE, $233.35, OUTPERFORM)
Airbnb Inc. (ABNB - NASDAQ, $151.21, PERFORM)
Triterras Inc. (TRIT - NASDAQ, $6.21, PERFORM)



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Distribution of Ratings/IB Services Firmwide

			IB Serv/Past 12 Mos.	
Rating	Count	Percent	Count	Percent
OUTPERFORM [O]	447	69.73	236	52.80
PERFORM [P]	194	30.27	68	35.05
UNDERPERFORM [U]	0	0.00	0	0.00

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