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Clay Courtmanche

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Valuation of Crypto FinTech Companies and Bitcoin

Clay Courtmanche

University of New Hampshire

Peter T. Paul College of Business and Economics

Advised by Michael Hanlon

Honors Thesis

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Abstract

Companies like Coinbase, Robinhood, and MicroStrategy rely on Bitcoin as an integral part of their business model. My research speculates on reasons for the closely related price movement of Bitcoin and these three publicly traded financial technology firms. Bitcoin gradually has been integrating into our financial systems. This paper explores opportunities and threats to Bitcoin and crypto fintech firms, as well as their reaction to the current macroeconomic landscape. While Bitcoin faces major hurdles like volatility and media distrust, its' persistence thus far has been driven by the disruptiveness of its' underlying technology. As institutions begin to orient themselves towards a future cryptoeconomy, uncertainty in this space will settle. A future cryptoeconomy will have benefits for all types of people including citizens of developing countries, independent artists, and the media industry. Benefits include increased access, security, and freedom as well as lower costs to send and receive money. This paper investigates the state of Coinbase, Robinhood, and MicroStrategy as they are pioneers of the crypto movement. Information is provided on the viability of these companies as crypto investments, and how they compare to Bitcoin.

The goal of my research is to expand on the literature surrounding the viability of Bitcoin as an asset class. More specifically I explored how fluctuations in the price of Bitcoin effect the publicly traded stock price of financial technology (FinTech) companies that use cryptocurrency (crypto) as an integral part of their business model. Not long after its' inception, cryptocurrency took the public markets by storm, causing a lasting impact in all sectors. Reddit threads initiated a price inflation of assets including crypto "to the moon". This helped to create a new category of "meme stocks". Defaulting companies like GameStop and AMC were (for a short period) brought back to life. After the dust settled, cryptocurrency proved to be here to stay. In fact, analysts forecast the global crypto market will reach \$4.94 billion by 2030, according to a 2021 study. That is triple the 2020 estimations of \$1.49 billion. Never has an asset class shown explosive price level gains and massive media attention like crypto has.

1.1 Institutional Movement into Crypto Markets

In recent years, there has been a corporate movement into the crypto space. This expanded to well-known institutions that now look to take advantage of the infancy of crypto markets. Whether it's developing shops in the Metaverse, or adding crypto investments to their balance sheets, the institutional adoption of crypto technology is undeniable and irreversible. With this knowledge, my goal is to encourage public understanding of blockchain technology and speculate on various investment opportunities and their viability. I explored answers to the questions "Is there value in investing in the cryptocurrency market? And if so, how can this value be realized?" To address these questions appropriately, it is necessary to have a basic understanding of how Bitcoin and Blockchain technology operates. Afterwards, I will discuss the three publicly traded companies that I compared against Bitcoin. These companies: Coinbase, MicroStrategy, and Robinhood, all rely on Bitcoin for the success of their business. I will lay out

how each company's business model is oriented with Bitcoin technology in mind. Finally, I will explain the analysis I chose to run and what my findings mean for the crypto market going forward.

2. Literature Review

2.1 The Guide to Bitcoin

The Guide to Bitcoin, by Matt Hougan and David Lawant, simplifies the fundamentals of Bitcoin and, more broadly, Blockchain. They address two main concerns. The first being to create a guide of the fundamentals of crypto that is easily digestible by the general public. The second being to provide readers access to the current landscape of valuation methods whilst clarifying the advantages and drawbacks of each. The fundamental functions of Bitcoin assert why the asset class matters at all. Bitcoin provides a domain for financial transactions without the necessity of a "trusted intermediary" (The Guide to Bitcoin, Pg. 2). This solves the longstanding problem of a waiting period (usually days) associated with wiring money. Groups of transactions or "blocks" can be settled once both parties (the sender and receiver) agree to confirmation. Settlement is proposed by "bitcoin miners" which are collections of computers, each with an updated copy of the blockchain database, that layout the network for block settlements. Miners are incentivized to solve the mathematical puzzles required to settle transactions through the reward system of newly minted bitcoin (currently 6.25 bitcoin rewarded per new block). The solutions to these puzzles are easily checked, upholding security within the system. The entire database continues to operate without the need for a central organizing authority. This outline is the foundation for why blockchain is effective and ingenious. Overall, the value from a crypto asset like Bitcoin is based on its' functionality and how it disrupts fundamental western systems like the US banking system. This disruption includes cheaper,

faster, and more available settlements; digital scarcity and property rights; and digital contracts without the need for a trusted intermediary.

2.2 Coinbase Global Inc.

Coinbase (COIN) is a publicly traded company on the NASDAQ. They run the second largest cryptocurrency exchange by 24-hour trading volume at \$1,718,771,233 (as of 4/26/2023) and trade 241 different coins. According to their most recent press release on May 4, 2023, “Coinbase is building the cryptoeconomy – a more fair, accessible, efficient, and transparent financial system enabled by crypto. The company started in 2012 with the radical idea that anyone, anywhere, should be able to easily and securely send and receive Bitcoin. Today, Coinbase offers a trusted and easy-to-use platform for accessing the broader cryptoeconomy” (First Quarter 2023 Shareholder Letter). In this synopsis, Coinbase views themselves as being part of a global financial movement enabled by Bitcoin technology. This orientation towards the future “cryptoeconomy” is both a strength and weakness for Coinbase. With observably high growth rates since 2017, blockchain technology makes a strong case for being the future of global finance. However, crypto markets are young and volatile which means Coinbase operates in an industry that requires a high-risk tolerance. Considering macroeconomic struggles of the past year such as the conflict between Russia and Ukraine, and continued interest rate hikes that put pressure on sectors like technology, Coinbase has a lot to be concerned with.

2.3 Robinhood Markets LLC

Robinhood Markets LLC (HOOD) is a company traded on the NASDAQ that was founded in 2013. The company was first started as a financial services company that facilitates trade of stocks and ETFs. In 2015, Robinhood Crypto LLC was created along with their mobile application and expanded their business as an exchange for buying and selling cryptocurrencies.

A strength for Robinhood is that they facilitate commission free trade of securities. It is important to note this as a benefit of crypto technology. Robinhood flaunts their “mission to democratize finance for all.” in an April 3, 2023 Press Release. Since blockchain doesn’t require a trusted intermediary to verify transaction, exchanges like Robinhood can offer zero commission on trades. This acts as a benefit as it allows more access to cryptocurrencies as a possible investment class. Not only this, but there is less liquidity risk due to speed of transactional processing.

2.4. MicroStrategy’s Unique Long-Term Reserve Model

MicroStrategy is a company that services business intelligence, analytics, software, and more. They are listed on the NASDAQ exchange under the ticker MSTR. While Coinbase and Robinhood both act as exchanges for trading cryptocurrencies, MicroStrategy has a different method of involvement in the crypto landscape. According to MicroStrategy’s mission statement “We pursue two corporate strategies: (1) acquire and hold bitcoin, which we view as a dependable store of value supported by a robust, public, open-source architecture untethered to sovereign monetary policy and (2) grow our enterprise analytics software business to promote our vision of Intelligence Everywhere.” It is apparent that MicroStrategy is looking to take advantage of Bitcoins functionality. Due to this long-term stance on Bitcoin technology,

Fiscal year is January-December. All values USD Millions.	2022	2021	2020	2019
Cash & Short Term Investments	51	64	61	567
Cash Only	51	64	61	458
Cash & Short Term Investments Growth	-21.05%	6.05%	-89.28%	-1.77%

MicroStrategy has chosen to take a risk on the token and use it as a store of value on their balance sheet instead of cash. According to a report on April 6, 2023, MicroStrategy’s total holdings amounts to 140,000 Bitcoins which is worth roughly \$3.9 billion. MicroStrategy has

opted to move their cash and short-term investments into Bitcoin. The figure on page 8 is a Wall Street Journal chart of MSTR's balance sheet from 2019 to 2021. Between 2019 and 2020, there is a decline of "Cash & Short-Term Investments" by 90%. During this period, MicroStrategy's business strategy shifted towards a corporate adoption of Bitcoin as a reserve asset.

MicroStrategy acts as an industry pioneer and posted the following on their "Key Considerations for Corporate Investment in Bitcoin" page: "MicroStrategy is sharing its learnings and methodologies so that other organizations can successfully navigate the adoption of bitcoin as a treasury reserve asset." It is evident that MicroStrategy sees Bitcoin as a long-term store of value. From the beginning of November 2022 to December 2022, MSTR had a net increase of 2501 Bitcoins. After selling about 704 bitcoins at an average price of \$16,776 on December 22, MicroStrategy explained in an SEC filing that these losses would be used to offset capital gains, resulting in tax benefits for the company. Unlike other coins, Bitcoin is considered a commodity. This means it is not subject to the same wash-sale rules that securities are. Therefore, MicroStrategy does not have to wait 30 days to repurchase the investment to book the tax loss. MicroStrategy has had success using Bitcoin and its' advantages for the betterment of the company. I see many other large companies following this strategy.

3. Methodology

Through my research, I wanted to highlight the similarities in price movement between Bitcoin and COIN, HOOD, and MSTR. Coinbase and Robinhood are both exchanges that trade cryptocurrencies like Bitcoin, and MicroStrategy uses Bitcoin as an alternative reserve investment to cash. My goal was to display the relationship between these different investments and their price. Firstly, I compiled a decade of Bitcoin's price data (3/25/13 to 3/23/23). I then compiled the historical price data of COIN, HOOD, and MSTR since the IPO of each company.

This introduced the main challenge of the research. Since these companies have only been public for a few years, there isn't a huge timeline for comparison. MSTR, despite being public since 2010, hadn't developed its' Bitcoin strategy until 2020. So, for my research it would only make sense to compare price data after 2020. I used programming language R and Microsoft Excel to compute and compile the data. Price data of COIN, HOOD, MSTR, and BTC was pulled from The Bloomberg Terminal. For Coinbase, I used data from their IPO on 4/13/21 to 3/23/23. For Robinhood, I used data from their IPO on 7/28/21 to 3/23/23. For MSTR, I ran two separate regression analysis. I used data from the past decade from 3/22/13 to 3/23/23. The data was then split into two tables, the first was from before MSTR adopted their Bitcoin strategy (3/22/13-6/30/20). The second array of data is from after MSTR transferred their cash reserves into Bitcoin holdings (10/1/20 - 4/5/23). I analyzed both arrays of data separately and compared the correlational differences to observe how this transition impacted MSTR's pricing relative to Bitcoin's. The R squared value is found by squaring the correlation value. All price values are shown in dollars as it is the most common de facto world currency. Furthermore, each company is listed on the NASDAQ, an American stock exchange based in New York City.

4. Findings

4.1 Background

Correlation analysis will be used to draw conclusions from the data. Additionally, this paper will discuss the implications of the findings and provide suggestions for further research. The results of the research will ultimately provide valuable insight into the impact of the cryptocurrency market on publicly traded companies. In this investigation, Bitcoin acts as the independent variable. The three chosen public companies, Coinbase, Robinhood, and MicroStrategy act as the dependent variables. The goal of this correlation analysis is to

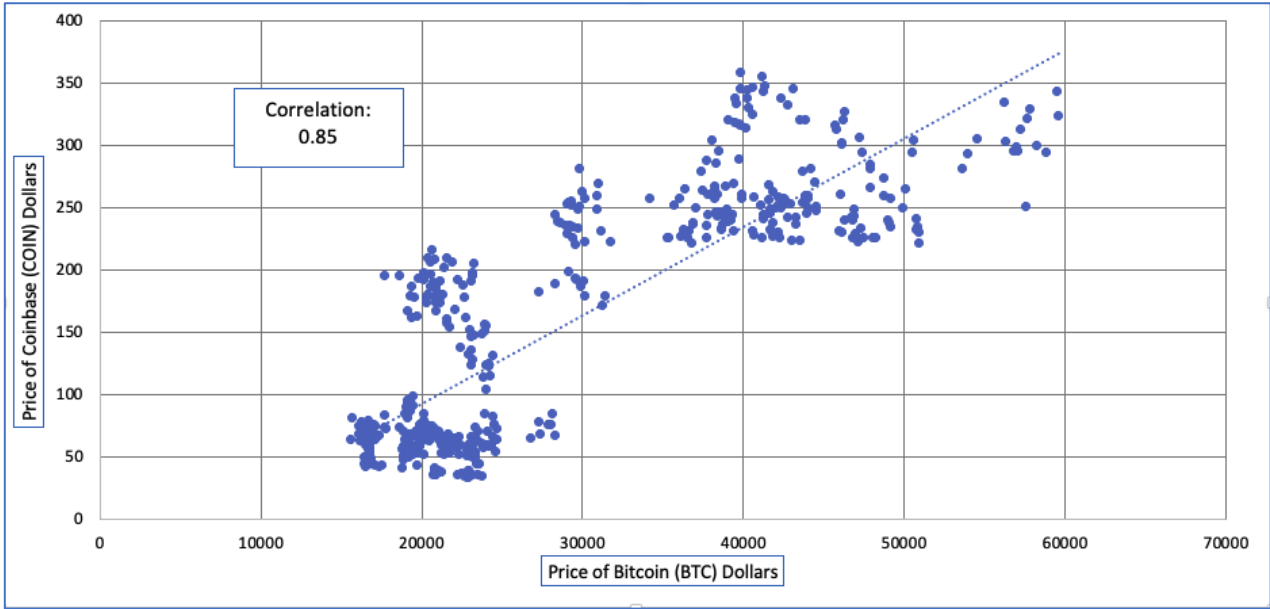
determine a corollary value and then an R-squared value. From here, we will be able to make speculations on each correlation individually and compare them to one another.

4.2 Coinbase Findings

For Coinbase, data outputted a correlation of .846 or 84.6%, which gives an R-squared value of .716 or 71.6%. The scatterplot on page 12 depicts this strong relationship. On the Y-axis the historical price values for Coinbase are plotted. On the X-axis the historical price values for Bitcoin are plotted. From this result, it is observable that price movements of Coinbase on the NASDAQ are heavily correlated with price movements of Bitcoin. Although this plot doesn't show a tight pattern, the line of best fit is the blue dotted line and helps to illustrate the relationship. This asserts my claim that Coinbase, being a company that acts as an exchange for crypto tokens like Bitcoin, is moderately reliant on the success of Bitcoin's price. To show this relationship in a different way, I used a line chart to depict the relationship between the two assets on the same axis. Through JMP, a statistical modeling software, I formed a model (bottom of page 12) for Coinbase and plotted in on the same chart as Bitcoin. Coinbase is plotted in blue, and Bitcoin (BTC) is plotted in red. Aside from a few major differences in price movements on the timeline, most values move together with the only difference being the magnitude of the change. With this knowledge, the relationship between the two assets is clear. Coinbase is reliant on Bitcoin's price stabilizing in the coming years.

4.3 Coinbase Charts

Scatterplot of Price Correlation of Coinbase (COIN) against Bitcoin (BTC)
(4/13/21 - 3/23/23)

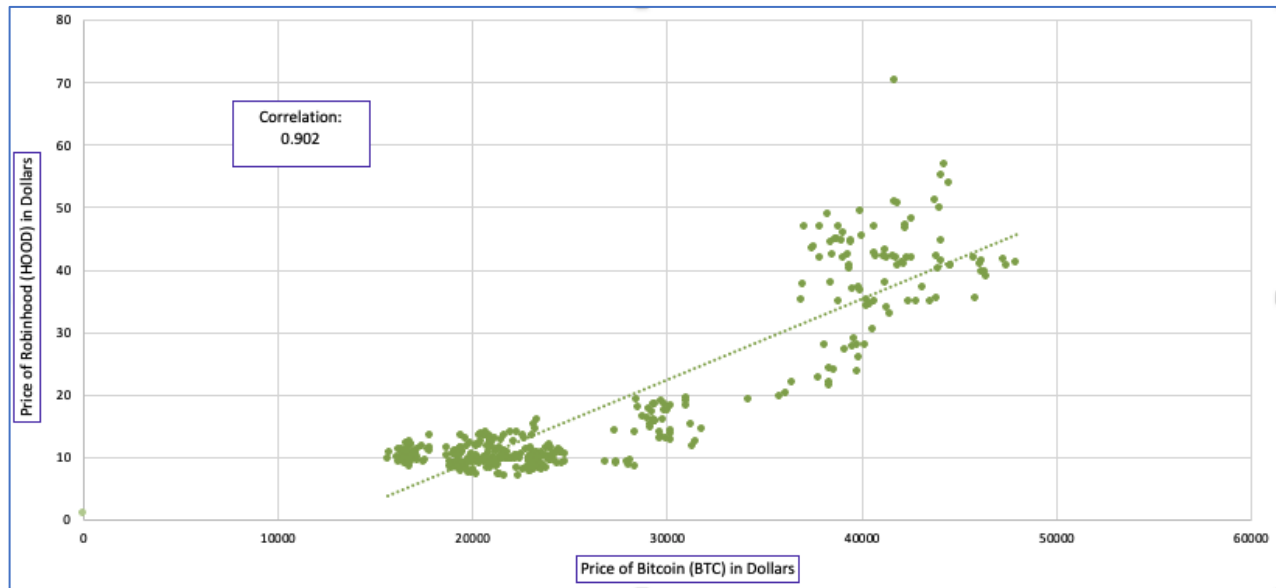


Line Chart of Price Movements Between Coinbase and Bitcoin
(4/13/21 - 3/23/23)



4.4 Robinhood Findings

Considering Robinhood and Coinbase are both crypto exchanges, it is not surprising that data on Robinhood gave a similar output. The correlation value for HOOD was .902 or 90.2%, with an R-squared value of .814 or 81.4%. Shown below is a scatterplot with price values from Robinhood instead of Coinbase. These values are depicted in green. On the Y-axis the historical



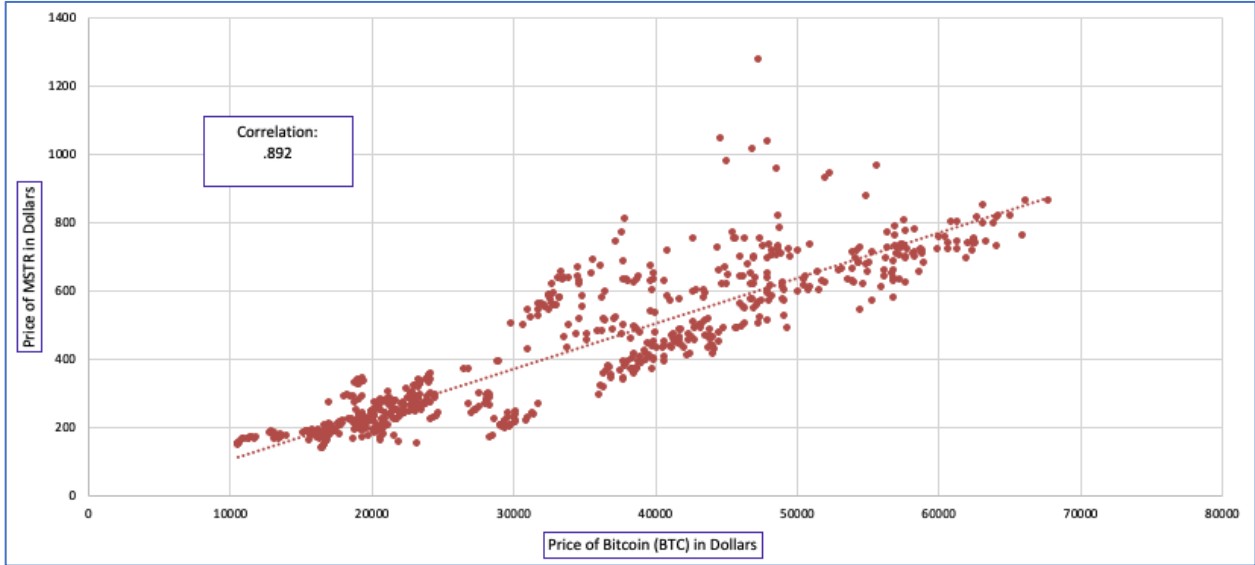
price values for Robinhood are plotted. On the X-axis the historical price values for Bitcoin are plotted. There is an observably stronger relationship between Bitcoin and Robinhood, and most plotted values fall near the line of best fit (shown in dotted green). With a correlation of over 90%, there is only one price value that is an outlier to the data. This price value of \$70.39 occurred on 8/4/21, only 5 days after Robinhood's IPO. Because most IPOs are more volatile within the first few months of trading, this data value doesn't usurp the underlying theme. Therefore, I don't see this outlier as posing a danger to the statistical analysis. Robinhood, like Coinbase, is reliant on Bitcoin's future performance for continued growth as a business.

4.5 MicroStrategy Findings

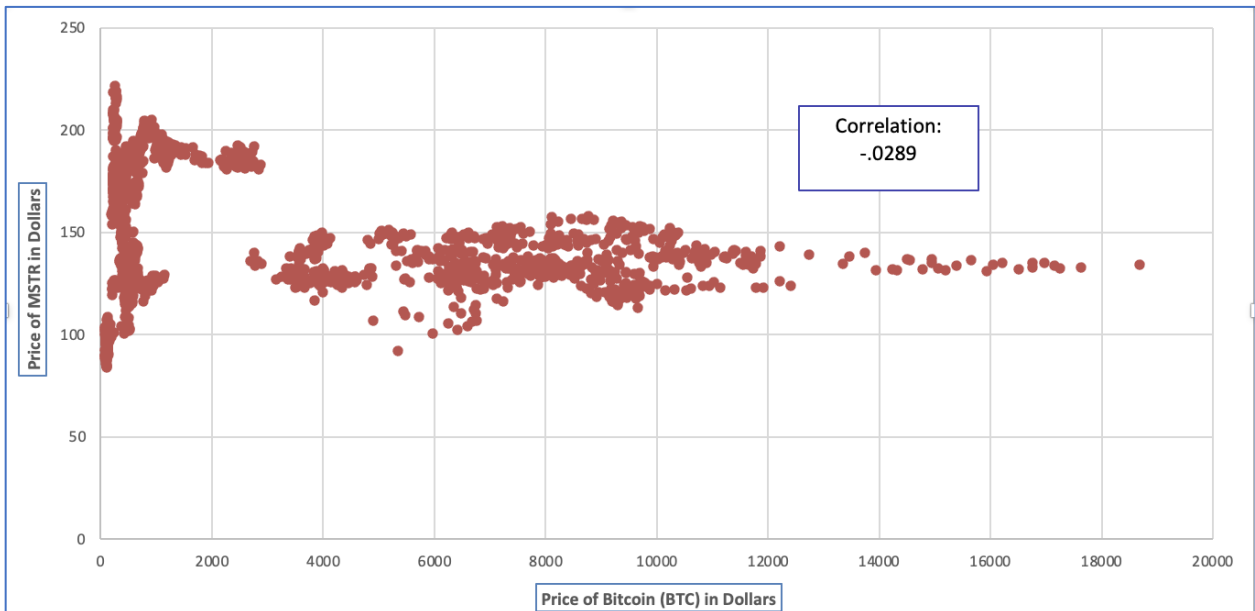
MicroStrategy required a different approach for statistical analysis. Because MicroStrategy adopted Bitcoin as part of their investment strategy in quarter 3 of 2020, it would be reasonable to only include price values for after this date. From data after quarter 3 of 2020, the regression produced a price correlation of .892 or 89.2% and the R-squared value was .795 or 79.5%. In the scatterplot on page 16, MicroStrategy's (MSTR) price values are on the Y-axis. On the X-axis the historical price values for Bitcoin are plotted. Like HOOD and COIN, MSTR also displays a strong correlation to the price of Bitcoin. The line of best fit, shown in dotted red, has many values that overlap it. Due to how tightly these values fit the dotted line, it is observable that MicroStrategy's massive Bitcoin holdings result in a stronger and more reliable corollary relationship than crypto exchange companies. To illustrate the changes in MicroStrategy's business model, I conducted regression analysis for MicroStrategy before the adoption of Bitcoin. Price data from between the dates of 3/22/13 and 6/30/20 were used for this analysis. Above is a scatterplot showing MSTR's relationship to Bitcoin between the aforementioned dates. The correlation for this set of data was -.0289 or -2.89%. During this timeframe, there is no positive relationship between Bitcoin and MSTR. Due to the negative correlation value produced, it is evident that price movements of Bitcoin have no effect on price movements of MicroStrategy. When analyzing the data before and after MicroStrategy's large scale adoption of Bitcoin, it is evident that after quarter 3 of 2020 MicroStrategy's price movements are moderately correlated to price movements of Bitcoin. It is important to note that the data does not yield r-squared values of above 95% (the reliable standard for regression analysis).

4.6 MicroStrategy Charts

Scatterplot of Price Correlation of MicroStrategy (MSTR) against Bitcoin (BTC)
(10/1/20 - 4/5/23)



Scatterplot of Price Correlation of MicroStrategy (MSTR) against Bitcoin (BTC)
(3/22/13-6/30/20)



4.7 Limitations of Results

A primary limitation of my research was the limited timeline of data available. Because innovation in financial technology has just begun with the development of Web3 and blockchain, most companies have only been trading publicly for a couple of years. The inability to compile decades of financial information is a limitation of my research. Beyond that, Bitcoin has seen massive influxes in traded volume between 2020 and 2022. This is due to the crypto markets being subject to news trading. In various social networks, media attention directly impacts Bitcoin's price. A 2019 study by Philippas, Rjiba, Guesmi, and Goutte suggests that "media networks have only a partial influence on Bitcoin prices, which is greater on periods with higher uncertainty" (pg. 42). During the COVID-19 recession in 2020, growing market uncertainty and media distrust meant that many investigated cryptocurrencies as possible alternative assets. Despite growing interest, Bitcoin's price fluctuated greatly. This was caused by macroeconomic uncertainty due to the global health crisis and the infancy of governmental regulatory action for crypto. Now that cryptocurrency is beyond its' institutional acceptance and the financial market is moving towards digital assets as alternative investments, Bitcoin has more stability now than ever. While negative media attention and governmental regulation was once a threat to Bitcoin, it is now seen as a strength that the asset lasted through a recessionary period and cannot be controlled by governments. The statistical analysis in this research is convincing. Considering domestic economic markets are impacted by human behavior, it is very difficult to produce an R-squared value higher than 90%. Regardless, Coinbase, Robinhood, and MicroStrategy all yielded R-squared values above 70%, with Robinhood yielding the highest value above 80%. What do these relationships mean for Bitcoin and for the companies that rely on Bitcoin's success?

5. Discussion

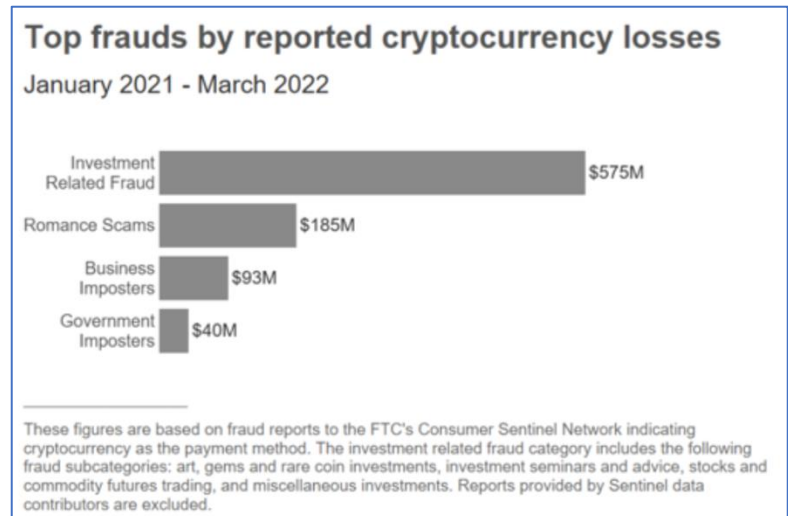
5.1 Digital Asset Landscape

When comparing my results to those of the relevant literature, there are some similarities and some differences. Bitcoin has been subject to many studies, despite being a new technology. While some conclude on the inefficiency of the Bitcoin market (Bariviera, 2017; Nadarajah & Chu, 2017; Urquhart, 2016) others speculate on the crypto markets in a bubble (Cheah & Fry, 2015; Cheung, Su, & Roca, 2015). It is important to note that, in the infancy of this space, it is very difficult to conduct proper valuation with price determinants and other assumptions in the way. Current theses display countless new valuation methods for digital assets and Bitcoin. For true valuation to take place, one must determine the appropriate method. Is Bitcoin a store of value? Is it a small emerging economy? Should it be valued as a security or a commodity? A recent study by Dr. Ken Alabi is titled “Digital blockchain networks appear to be following Metcalfe’s Law” (Alabi 2017). It’s clear that it is not yet understood how Bitcoin will fit into the investment landscape.

5.2 Threats to Crypto FinTech Firms

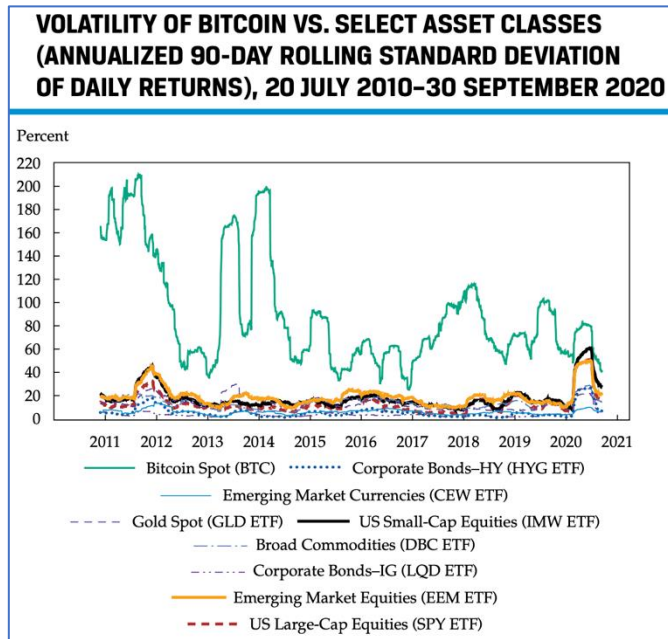
Through statistical analysis, strong price correlations were found between Bitcoin and three FinTech companies. While Coinbase and Robinhood offer trading of hundreds of tokens on their platforms, Bitcoin is the most popular. In fact, according to a 2022 study by Statista, Bitcoin had a relative market share of over 40% at the end of 2022. With this in mind, crypto exchange companies will assume a similar risk to that of Bitcoin. Threats to Bitcoin include heists and fraudulent activity, and volatility in value. These threats are also assumed by Coinbase and Robinhood due to their high correlation. Despite the security that is built into the Bitcoin algorithm and the verifiability of transactions, cryptocurrencies have been subject to large

amounts of fraud and hacking. To the right, a bar chart displays the amount of reported cryptocurrency losses due to fraud, differentiated by type of fraud. Between 2021 and March of 2022, there has been \$575 million dollars lost to fraudulent activity in the crypto space. This data is according to



the FTC Consumer Protection Spotlight. Companies like Coinbase and Robinhood have the challenge of cracking down on fraudulent activity and providing security of funds to their users. Not only are individuals committing hacking and scamming for cryptocurrency, but companies are as well. The most notable being the collapse of FTX and Sam Bankman-Fried. FTX is a crypto exchange company launched in May 2019. Sam Bankman-Fried was charged with wire fraud and conspiracy to commit money laundering when federal investigation determined he was misleading investors and using their billions of dollars for his personal use. FTX had reached an astounding \$32 billion dollar valuation before ultimately going bankrupt. In the end, FTX identified \$8.9 billion in customer funds that cannot be accounted for. While Bitcoin itself is created to be secure with traceable transaction history. There is no doubt that individuals will continue to try to take advantage of others through scams and hacks. Volatility is another threat to Bitcoin, and therefore to Coinbase and Robinhood. Bitcoin has displayed unprecedented volatility relative to any other asset class. In the figure on page 19, the standard deviations of daily returns are plotted for several relevant asset classes in the investing space. Bitcoin, shown

in green, shows hikes and dips of 100-150 percentage points. This is 5 times larger than any other movement on the chart. Despite this, it is observable that most of Bitcoin's volatility occurs from 2011 to 2015. In recent years, the volatility of Bitcoin is much milder as a consequence of institutional adoption. Whether its avoiding fraud or market volatility, the primary risks to Bitcoin as a possible investment class will likely be less of a



problem in the future. The government has cracked down on fraudulent activity, and Bitcoin persists as a viable alternative asset despite its' volatile past. The public will be more educated on the crypto domain as it integrates into the financial industry. With the uncertainty that surrounds the crypto landscape, it is easy to see why major adoption of this new currency type is gradually progressing. This gradual progress and uncertainty may be due to how disruptive the technology is to our western banking systems. MicroStrategy is positioned differently relative to of fraud and volatility threats. In terms of fraud, MicroStrategy doesn't have any clients who own Bitcoin on their behalf. Therefore, MicroStrategy will not need to ensure security for clients like Coinbase and Robinhood do. While fraud isn't threatening to MicroStrategy's business, having their reserve assets invested in Bitcoin raises concerns around volatility. If volatility persists for Bitcoin, liquidation issues may arise for MicroStrategy, especially if Bitcoin's price plummets as it has many times in the past. In this way, MicroStrategy has its' bets hedged in favor of Bitcoin, as do Coinbase and Robinhood.

5.3 Opportunities for Crypto Expansion

Disruption is a primary indicator for opportunity within any industry. Bitcoin is disruptive in a couple of aspects including nonphysicality, division, and security. How do these aspects benefit companies like Coinbase, Robinhood, and MicroStrategy? First, let's explore each aspect. Nonphysicality means there is no physical instrument needed for Bitcoin transactions to take place. Therefore, storing wealth with Bitcoin is much easier than other assets because there is no physical bank where all the funds reside. Additionally, there are no costs associated with printing or distributing physical bills, because these are not needed. This aspect of Bitcoin provides a cost-saving function new to the industry. Division means Bitcoins are easily divisible. Each Bitcoin may be divided up to 8 decimal points which is beneficial for two reasons. The first being that Bitcoin investors can invest as much or as little as they desire. This helps lower class investors and developing countries due to the low cost of entry. Secondly, the division of Bitcoin also improves liquidity by allowing higher volumes of trade to take place with lower amounts. Security is an essential part of Bitcoin's disruption. All Bitcoin transactions are secure and cannot be accessed by the public or by any government. Bitcoin transactions are non-reversible, which protects sellers from fraud and personal information on either party involved cannot be accessed. Ultimately, each of these disruptive aspects poses an advantage to Coinbase, Robinhood, and MicroStrategy.

5.4 Macroeconomic Analysis

When determining the state of an industry and forecasting performance in the future, it is necessary to analyze the health of the economy and address any pertinent influences. The crypto industry acts differently relative to macroeconomic factors than traditional asset classes. In March of 2023, the US experienced the collapse of Silvergate Bank. Not long after, Silicon Valley Bank and Signature Bank went bankrupt as well. This marked the 2nd and 3rd largest bank collapses in US history. While some analysts have falsely attributed this failure to the integration of the crypto industry, it is evident that several external economic stressors were at play. These include the rapid increasing of interest rates by the Federal Reserve, a decline of fintech firms and other startups, and the global conflict between Russia and Ukraine. In the past, largescale recessionary pressures and bank failures carry over onto the most fragile industries like startups, fintech, and cryptocurrency. However, cryptocurrencies and Bitcoin's price specifically, was not negatively affected. In March following the bank collapse, the Fed announced its' plan to raise interest rates for the 10th consecutive time. Over the same period, Bitcoin's price rose from 20,000 and eventually stabilized around 28,000. Against the expectations of many, Bitcoin seems to be functioning as an alternative store of value. In this case, economic turmoil caused investors to look towards Bitcoin as a reserve asset as opposed to having their cash in a bank account. This is bullish news for Bitcoin. Going forward it will be interesting to observe if Bitcoin's fundamental functions persist against the distrust and volatility that has occupied the token's past.

6. Conclusion

6.1 Impacts of the Cryptocurrency Domain

Bitcoin's basic functionality of secure, cost-free transactions provides opportunity and freedom to citizens of developing countries, independent artists, and the gaming industry. Jack Mallers is the CEO of Zap Solutions, a Bitcoin investment and payment company that is working with credit card giant Visa. Zap provides transactions on Bitcoin's Lightning Network and allows people all over the world to access wallets to send and store their money. Financial service companies like Zap that leverage Bitcoin have an advantage over traditional firms as they can offer faster, cheaper, and safer transactional access. Bitcoin's disruptive nature allows people in developing countries to fund that cannot be regulated by corrupt governments. This ultimately gives more freedom to the global citizen from governmental control. The art industry has also been majorly impacted by cryptocurrency. Non-Fungible Tokens, or NFTs are digital assets that allow ownership of digital art or other media that is verifiable by a Blockchain. With this new technology, artists gain freedom from labels or other corporations and can operate independently by selling their art, music, or media on a Blockchain. Similarly, in the gaming industry, many companies have issued NFTs for game characters or merchandise. By working through the Blockchain network, companies may also offer special access to events or future discounts for NFT owners. Overall, the Blockchain network provides access, freedom, and security to developing countries, the art industry, and media.

6.2 Where to Invest?

Coinbase, Robinhood, and MicroStrategy are all oriented towards a crypto future. This poses some advantages for the firms, including the growth and expansion of the crypto industry. However, Coinbase and Robinhood are threatened by ongoing fraud within the crypto markets,

and all three of these companies are relying on Bitcoin's price to stabilize. If Bitcoin's volatility persists, then radical price dips could negatively impact the ability of these firms to grow and succeed. After conducting this investigation, it is conclusive that crypto fintech companies like the three chosen are very exposed to Bitcoin's price movement. For this reason, investing directly in Bitcoin would be favorable to investing in crypto fintech companies. While a successful Bitcoin future could mean continued success for these companies, it is unclear to what extent Bitcoin's success would be reflected in the stock valuation of Coinbase, Robinhood, or MicroStrategy.

6.2 Future Outlook

Going forward researchers will have the ability to access longer periods of financial data on crypto exchange companies that will aid in the reliability of their research. If I were to continue my research, I would explore stock valuation methods for crypto fintech firms and investigate how positive price movements in Bitcoin were to impact these methods. Other companies that operate in the crypto industry would also be interesting to investigate like mining companies and banks that offer crypto ETFs. The cryptocurrency industry has taken the world by storm. It is inevitable that major changes are soon to come regarding the way we interact with the financial system. Assuming risks like volatility and fraud are accounted for, there is unbelievable opportunity for companies to leverage solutions that provide access, freedom, and security worldwide.

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