Investing In Cryptocurrency Starting with the Source

This paper provides consolidation of information needed for fundamental investment decisions for adding cryptocurrencies to your portfolio covering risks to taxes. Cryptocurrency provides an opportunity for an additional asset with low covariance to traditional assets. When this article was written, Binance coin (BNB) was trading at $15.15 with a market capitalization of $2.4 billion, daily transaction volume was $322.2 million and there were 155.5 million coins in circulation.

Key Findings

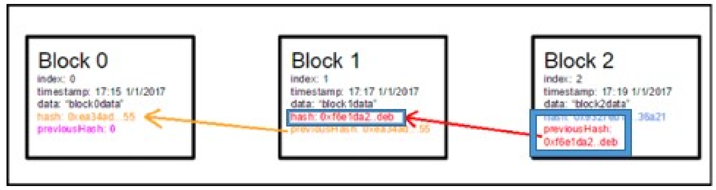
- Binance is undervalued when looking at historical returns and comparable exchanges. Binance could be undervalued as much as 75-200%.
- Changing the portfolio composition from 50/50 stocks and bonds to just 40/40 and allocating 20% to crypto reduced the correlation to the US market from 0.97 to 0.25, increasing the Sharpe ratio from 0.7 to 1.33. This more than doubled the worst year experienced for returns but brought up the maximum yearly return from 31% to 284%.
- The correlation between BNB and BTC reported between March and September of 2019 was 0.55.
- Cryptocurrency has more advantageous tax benefits than individual stocks and bonds.
- The market is still undefined but needs somewhere to help take projects to market, provide liquidity and efficiency.
- Binance has taken projects public as quickly as 22 seconds through lottery systems which requires the buy-in of investors to their exchange.
- Binance is in an excellent position to acquire companies on a global scale
- Binance is extremely diversified. For instance, the top 10 countries account for just 48% of their website traffic (Binance.com, 2020), while many of their competitors get more than 40% from just one country.
- Binance charges some of the lowest fees in the space, attracting new investors.
- 90% of employees that work for Binance choose to take their compensation in BNB tokens.
- Portfolio composition of 50% BNB, 25% BTC, and 25% ETH in 2019 would have had a return of 89.05% with a large deviation though of 92.89, leading to a Sharpe ratio of about .96
- A portfolio consisting only of BNB would have earned a return of 132.78% with a deviation of 140.02, leading to a Sharpe ratio of about .94.

Recommendations

- Investors should consider adding cryptocurrency to their portfolio to reduce correlation to US markets and other global markets.
- Binance is undervalued and should be added to one's cryptocurrency and investment portfolio.
- A starting investor in cryptocurrency should consider a blend of Bitcoin, Ethereum, and Binance Coin as their objectives are each unique but overweighting Binance is preferred. If you are new to crypto my viewpoint is about 50% BNB, 25% ETH, and 25% BTC.
- Binance as the token taking many viable projects to market and providing liquidity, Bitcoin as one of the gold standards for payments, and Etherum as a payment smart contract platform.

Overview of the blockchain technology

What is blockchain? Blockchain is essentially an irrevocable record showing transactions as well as participants in those transactions through a network of ledgers. The transactions include time stamps and build off previous transactions. Anyone who has access to the ledger can track events since the beginning of the blocks.



An overview of tokens

Cryptocurrency is a subset of blockchain. Tokens are a subset of cryptocurrency. Tokens are a unique form of cryptocurrencies that lie on their own blockchain to form an asset or a utility (FRANKENFIELD, 2018). Tokens are most often created and distributed through initial coin offerings (ICO). Utility tokens are app coins or user coins to enable future or current access to products and services. "A security token is a digital asset that derives its value from an external asset that can be traded (Katalyse.io, 2018)". In the U.S., the Securities and Exchange Commission can and has stepped in to see these are treated as a security and the Initial Coin Offering process is mandated.

Initial Coin Offering

Binance defines an ICO as "a method of raising funds through the use of cryptocurrencies. Its use is most popular in projects that have not yet fully developed their blockchain platform, product, or service. The payment is usually made with Bitcoin or Ethereum, but in some cases, fiat is also accepted. Investors participate in Initial Coin Offerings with the hope and expectation that the company will be successful, driving demand and causing the underlying tokens to increase in value. In other words, they hope to get a good return on investment (ROI) as early supporters of that particular cryptocurrency project." (Binance, 2019). It is essential to explain that crypto assets are not backed by anything. The faith of the company only backs the currency; investors have nothing to reprimand in the case of company insolvency, which is a similarity shared with fiat currencies such as the United States dollar.

Cryptocurrency mining

Mining is a necessary part of a proof-of-work system for maintaining and verifying cryptocurrencies. Every time a cryptocurrency transaction happens, it is verified for authenticity. This process is done by multiple "miners" solving a complex mathematical problem (Stroud, 2019). Miners often join a pool of miners to increase their chances of solving the problem and are paid in the currency they have found in addition to receiving fees. This incentivizes many individuals to join the process preventing a consensus 51% takeover which would be harmful to the consensus process.

Relying on mining price to determine the intrinsic value is not accurate

Reading about mining may spark an idea in your head for investing in cryptocurrencies that I also had: "why don't I figure out the cost of mining a coin and use that as an intrinsic value to see if the price is undervalued." This strategy can be used as a guideline but here are a few reasons to suggest that's a flawed strategy: proof of work can merge into proof of stake reducing the need for some miners, economies of scale will push mining toward the cheapest producers, technology advancement is hard to predict, regulations from countries or the blockchain project can alter or ruin this model.

Decentralized vs. centralized cryptocurrency

It is critical to explain decentralized vs. centralized as this is a hot debate in the blockchain world. Decentralized is defined as "the design of a network that isn't managed by a central party. Instead, peer-to-peer interaction drives the network, as no third-party is needed" (blockchain.wtf, 2019). Decentralization relies on the technology and the users to maintain a secure system. Centralization uses the blockchain technology that has decentralized characteristics but is overseen by an organization, company, or board. Whether something is decentralized or centralized is a hot debate in the crypto field. The most commonly known decentralized cryptocurrency is Bitcoin, and one of the most well-known centralized cryptocurrencies is Ripple (XRP).

The tax advantage of investing in the cryptocurrency space in the U.S.

Cryptocurrency taxation has been a hot topic; previously, crypto taxation was thought to be similar to a traditional IRA vehicle. Recently the IRS has given more guidance on how to treat these investment vehicles. Although there is still some ambiguity out there, relative to stocks, cryptocurrencies are taxed in a more favorable matter. These coins are treated as property and cannot be exchanged, so when a coin is sold, sent, or used to purchase a good, the gains on crypto taxed, and the short-term capital gains apply if the coins are held for less than one year, and long-term capital gains apply if the asset is held for over a year (Mordecai Lerer, 2019).

With these assets, you have control over the taxable status similar to growth stocks; they do not generally give dividends that are taxable but do repurchases or what I like to refer to as burn dividends. Burn dividends are when they destroy tokens to reduce the amount of supply. Like stocks, you can still donate them to charity without paying taxes on the gains (Mordecai Lerer, 2019). The IRS still undefines taxation around blockchain forks; a fork is when a cryptocurrency splits into two new currencies. Another advantage of crypto being labeled a property is being able to sell assets with losses at the end of the year and offset gains and be able to purchase the asset back without the 30-day wash trade rule (Cross, 2018).

Growth of Cryptocurrency and the blockchain technology

The cryptocurrency technology was first seen in 2009 when Bitcoin was created by the mysterious Satoshi Nakamoto (Marr, 2017). It was first valued in 2010 when 10,000 bitcoins were transferred for two pizzas worth more than $100 million today (Marr, 2017). At the end of 2013, the market cap for cryptocurrencies was approximately $10.5 billion on October 1, 2019; it was approximately $220.8 billion at the time of writing this article. Despite its exponential growth, "pure money", the traditional currencies, are approximately worth $36.8 trillion.

What has precisely caused the growth of cryptocurrencies over time? Initially, cryptocurrency growth may have come from the simple exploration and curiosity of tech-driven individuals. As a payment system, it has attracted investors' eyes as a fraud-less, government-less, no border system. Some people who live in countries like Venezuela that have had such hyperinflation that the price of chicken has gone up 700% year-over-year (Henderson, 2018) have looked at cryptocurrencies as a potential safe-haven from an unstable currency.

Although there has been an enormous amount of growth of cryptocurrencies from the sources above, it is vital to note that many cryptocurrencies' rapid price growth has resulted from the fear of missing out (FOMO) investing. FOMO price has been seen various times in cryptocurrency rallies as supply and demand drive the price of the industry. But we have seen this through history with everything from gold to tulips.

Growth in cryptocurrency can be expected in the future due to institutional investors such as Fidelity allowing purchases of digital assets. As more institutional investors invest in cryptocurrency and blockchain technologies, there would be more inflows of funds and progress in the technologies. Projects like Libra have even shaken the U.S. legislation and demanded people's attention on the currencies.

Globally, we may see a shift of countries with unstable currencies and high inflation push towards cryptocurrency. For example, "The International Monetary Fund (IMF) recently stated that Venezuela is on track to reach one million percent inflation by December. (SHARMA, 2019)". To put that in perspective, a cup of coffee costs 1 million bolivares (SHARMA, 2019). This unprecedented inflation has caused a surge in Bitcoin volumes within Venezuela and shows opportunities for countries with corruption and or high inflation as well as countries with weak banking infrastructures a new breeding ground for cryptocurrencies to thrive. This even allows individuals to hold and trade at least six fiat currencies as well as other asset-backed currencies, allowing anyone with a smartphone or a computer like ATM in areas to transact in a lot of different currencies.

One takeaway here is to challenge people with a stable banking system to consider these hyperinflations and poor banking infrastructures. To this day, 1.7 billion people still do not have access to a bank (McCarthy, 2018).

Risks of cryptocurrencies

There are a vast amount of risks in cryptocurrencies to discuss, and this entire paper could center around just that. One of the first concerns of many is they are not backed by anything but faith in the projects and user adoption- this can be seen in other currencies as we push away gold standards and asset-backed currency. Another risk is insurance. Cryptocurrency is new and has been the subject of cyber attacks and insuring against these risks will take time. Also causing concern is the possible event of user error. There have been situations where a user has accidentally paid thousands in hidden fees when sending coins, sent coins to the wrong addresses, and stored coins on a flash drive that later gets ruined or lost.

There are risks from regulatory agencies as cryptocurrencies have been seen as fuel to black-markets such as the Silk Road as well as funding terrorist groups. Regulatory concerns continue to grow as regulatory agencies look to not only protect investors and users but protect themselves from concerns around tax and hurting their ability to control monetary and fiscal policies. Electricity continues to be a matter of concern and raises interests by many as Bitcoin mining alone is already burning up as much electricity as Ireland (Helman, 2018).

Next is the big risk for investors, volatility. Cryptocurrencies are driven by supply and demand of individual investors which has been wildly affected by fear and FOMO investing. Volatility can be a friend for those strong-minded long-term investors looking to buy and sell opportunities. Another volatility concern is around peer to peer lending using cryptocurrency. As these services grow in popularity, they are accepting cryptocurrency as a form of asset-backed lending and ensure that this collateralization will be liquified if needed to meet the loan requirements but with unstable industry leverage and asset-backed lending can create an influx in supply. With already dropping demand in times, it can fuel even more significant downturns.

The investment case for Binance

If, after reading about technology and risks involved with investing in blockchain, you are still looking at investing in this space, there is a magnitude of options. There is the classic direct purchasing of coins or crypto hedge funds if you are an accredited investor. But there is another alternative if you are looking to invest; investing in one of the key players helping match buyers and sellers of the cryptocurrency. Investing in the already profitable project of Binance may be a good investment option for those looking to make a bet on the long-term future of the industry.

The following is a shocking statistic on the strong market presence of Binance. “What we see here is that Binance is the top-traded exchange for 82% of the top 50 tokens. And Binance is facilitating 36.6% of global crypto spot trading volumes. (Hodl, 2019). This growth has been fueled even before fiat currencies like the USD could be deposited. Prior all the funds came from an outside source of cryptocurrency that was deposited into Binance for trading. This suggests that users and investors within the space gravitate towards Binance. Binance charges no fees for depositing cryptocurrencies and offers some of the lowest fees at 0.1%.” (Binance, What Is an ICO (Initial Coin Offering)? 2019). Although I do not promote it, even individuals who prefer to store their coins in apps such as Coinbase can deposit cash, use USD coins to transfer to Binance to make their trades and transfer it back taking revenue away from these apps and costing them money in potential liabilities of storage and use of the app.

Use cases of Binance Coin

As defined earlier, Binance coin or (BNB) is a utility token. It offers some benefits to users such as reduced fees on top of the already low fees. Holders of the coins get reduced fees just for holding the coin and can get a 25% discount on fees (Binance, What Is an ICO (Initial Coin Offering)?, 2019) if they use the coins (this discount is to be phased out over time) attracting volume to the token from all the trades being placed within the service.

Binance Coin’s form of dividends

In an interview on a cryptocurrency podcast called Unchained CEO of Binance Chengpeng Zhao said, "every quarter Binance will use 20 percent of our profits to buy back and destroy them. So basically, taking more coins out of circulation. Financially this is a very similar effect to giving a dividend distribution, but mechanically we're not sending any money out. We are just destroying money we have, or we're just destroying coins we have. Again, there's a limit to that. We will only destroy up to half of all the total issued amount, which is 100 million. The total issued amount is 200 million and we're going to destroy 100 million eventually” (Shin, 2018).

In 2019 Q3 Binance said the following; “Binance has conducted its quarterly burn of 2,061,888 BNB. This burn is the same as taking $36,700,000 worth of BNB out of circulation, permanently.” (Zhao, 9th BNB Burn: Q3 2019 Recap from CZ, 2019). By the third quarter of 2019, Binance has burned $76,138,000 worth of coins (Zhao, 9th BNB Burn: Q3 2019 Recap from CZ, 2019). At the time of writing this article, BNB's price was $15.15 and a market cap of $2.4 billion. This burn puts Binance's dividend rate at approximately 3.17%, and if they keep that pace up, they will issue a special dividend of 4.23% while still in a high-growth state.

That is not Binance’s only way of trying to return value to investors in the form of special dividends. Binance recently purchased another exchange called JEX, now called Binance JEX; an independent team of Binance. Binance distributed 200,000,000 unlocked JEX coins to its users (I did receive the dividend) and plans on distributing 30% of Binance JEX profits monthly. The dividend was worth $12,000,000, Binance reported. The coins will go to users based on overall holdings, and users must hold a minimum of 10 coins. The formula for distribution is as follows: JEX received by each user = Total JEX tokens to be distributed * User BNB holdings ratio. User BNB holdings ratio = Lowest user BNB holding amount each day / Total of all lowest user BNB holding amounts each day. This also equated to approximately a 0.5% special dividend bringing the current yield in 2019 to approximately 3.67% and a target of 4.73%.

Binance also did a giveaway lottery system for $300,000 in BAND tokens. Although some of the airdrops will be unknown, the BNB burn is consistently happening quarterly, and these efforts show that Binance is making strides to distribute value to their token holders, employees hold their fair share of the token as well and want to see progress around this.

Binance’s great position for acquisitions

Binance, with its adaptive team and community respect, as well as their large cash flow, are in an excellent seat for acquisitions within the blockchain space. Not only did Binance acquire the JEX exchange, which was discussed previously, they also acquired TrustWallet. In a simplified explanation, TrustWallet is an advanced online tool for holding cryptocurrencies on a mobile device, and the JEX exchange will help Binance acquire a new team of individuals, customers, and tools for futures and derivatives trading. Binance has a well-branded name, a great team, and a large amount of cash to not only acquire companies but also partner with them and help them develop products and work on better marketing tactics.

Binance has launched Binance Labs, which is a venture arm of Binance (BinanceLabs, 2020). Binance helps actively invest in projects around the world: stable coins, payments, remittance, trading infrastructure, public blockchain, Interoperability, wallets and plugins, applications (BinanceLabs, 2020). “The mission of Binance Labs is to support industry projects that help grow the larger blockchain ecosystem, realizing the full potential of blockchain technology and its social impact, while increasing cryptocurrency adoption globally.” (BinanceLabs, 2020). As of January 7, 2020, Binance Labs had 12 companies in its portfolio.

Under Binance Lab, companies that make it into the Binance Lab get a 10-week on-site program to help developers with the resources necessary to be successful. Because of Binance being the top exchange in the world, it is in a position to acquire and invest in companies that are disrupting the industry.

Binance’s team buy-in

It is no secret that Binance's tremendous growth has been significant due to its management team and skilled employees from various backgrounds. The company has not only created a system where they strive to have the market's lowest fees, but they continuously innovate and focus on growth even in adverse market conditions. The company also focuses significantly on compliance and is working with countries directly to create a fair set of laws to be governed by in these new enterprises.

CEO Zhao said in 2018 that 90% of employees that work for Binance choose to take their compensation in BNB tokens showing their team's commitment to the currencies (Young, 2018). Binance is one of the only projects out there that almost all employees are compensated in their currency. This payment method not only benefits the company and investors by a more considerable buy-in for employees but also allows the company to retain a more significant amount of its cash flow while aligning everyone's interests. This payment plan not only allows the company to retain a more considerable amount of its cash flows but also allows it to plan cash flows and financing better using the tokens ahead of time and creating a higher volume in its tokens.

Using Binance as a launchpad for IPO's

Binance Launchpad is a platform for transformative projects. Binance Launchpad has completed 16 launches since its inception. Binance uses a lottery system for its users to acquire the tokens first before trading on the exchange. For an investor to qualify for the lottery system, they must have 500 BNB tokens (ROUSEY, 2019), which at the time of writing is equal to approximately $7,575, and even with that if chosen the investor has a minimum amount required to participate in the token sale. It is also important to note that countries can be banned from participating in Launchpad events due to regulations.

Before Binance's Launchpad, a project must go through a vetting process around the maturity stage of project development, readiness for large-scale operations, strong and purposeful team, the potential for growth and development towards a larger cryptocurrency ecosystem. (ROUSEY, 2019). In 2019, Binance Launchpad completed 11 launches. An analysis of these launches shows that the total USD done through Launchpad for 2019 was $19.2 million, with an average of about $1.75 million for a launch. The companies doing their launch through the Launchpad, on average, committed 10.4% of their tokens to be distributed through this method.

It is key to note that many of the projects also released their tokens out over time through rounds as well as kept many of the tokens for their teams and treasuries. The Binance Launchpad appears to be a success, according to CEO Zhao on Twitter, Fetch (FET) launch was completed in 22 seconds. Although I did not qualify for the lottery system, I did test several launches out through participation two for sure were Harmony and Elrond; the process was rapid, and smooth trading took place quickly after the launch. **

Between Binance Launchpad and Binance Labs, the company could be involved in many new projects successfully entering the market. Although hard to determine, one key critique of these launches by critics is that this is used to pump up the tokens and dump them into the market. One important factor to note is that pump and dump schemes are common in leading equity markets around the world as well, which is an indication that this is not a unique risk of cryptocurrencies.

Binance's strategy for its political environment

In the past, Binance has been accused of avoiding legal jurisdictions by moving countries often with their nimble teams. Zhao argues this is a bad mindset saying, "I fully respect the laws of every country, every jurisdiction but most people have this mindset that you've got to stay in one place and work with one government. But why is that? Why can't you go to a place to work with a government that you choose instead of always being stuck in one place and working with a government that may or may not support what you want to do." (Shin, 2018). Previously, they did not participate in the U.S. market because of unfavorable regulations.

Binance has since worked with various countries in how the blockchain space should be regulated and has proactively worked towards creating global charity foundations. These factors have led to Binance to spread out into a lot of countries diversifying its geopolitical risk. Binance's top 10 country traffics are: Russia 9.29%, United States 7.81%, Vietnam 5.28%, Turkey 5.16%, Ukraine 4.45%, Brazil 4.13%, the United Kingdom 3.08%, Republic of Korea 2.9%, India 2.86%, France

2.67%. As evident, the top-10 countries account for approximately 48% of the total website traffic. (Binance.com, 2020).

Understanding Binance's competitive landscape

Unlike Binance, some of their big competitors have not had the same global diversification. For example, Coinbase has 44.02% of its web traffic from the US (Coinbase.com, 2020). Huobi, another competitor, has 42.74% of its web traffic from China (Huobi.com, 2020). This can be beneficial in the sense that they know their market and can work with less legislative bodies but can be a dangerous factor politically as the blockchain space is still being defined.

Until recently, when Binance introduced FIAT currency, investors preferred Binance to the point they were using external sources to import the currencies to Binance and then trade them. When looking at Binance's stance vs. Coinbase, the latter takes out insurance policies to mitigate risks, which are costs bared to the end-users where Binance has taken a different approach. Binance takes an exchange approach by educating investors on proper ways to store their coins and leave it up to the end-user passing the costs on to each user and maintaining a 10% trading fees fund to help cover extreme breaches; this fund is called SAFU (Binance, Secure Asset Fund for Users (SAFU), 2020).

Leaving insurance and geopolitical landscapes off to the side, one of the most important things investors look at is fees. Binance's fees for not using BNB to pay for the fees are 0.1%, and this can be discounted up to 50% using BNB to pay for the trades. Coinbase charges .99 on the first 10, 10-25 it's 1.49, 25-50 1.99, and 50-200 the fee is 2.99. It is conclusive that Coinbase's lowest fee is higher than Binance. Huobi charges a fee structure of 0.2%.

Understanding the significance of staking coins and lending coins

Binance already allows you to stake eleven coins that allow you to receive extra dividends/interest from your current investments. Binance also created lending products allowing investors to lend in multiple different currencies in fixed deposits redeemable after 30 days at this time and flexible deposits that are redeemable any day (Binance, Lending, 2020). One enticing offering currently is fixed BUSD, which at the time of writing was offering an 8% annualized return. It is key to note with short durations, there is reinvestment risk where when this ends, the next return offering will be lower, and delays between locking them in can lower returns as well. Locking in BUSD is a way to avoid price fluctuations as it is a stable coin and takes advantage of a desirable interest rate.

Binance Futures

Whether you agree or disagree with the high risks of futures in cryptocurrency, they are a tool needed to help create an efficient market where investors can hedge their risks and even speculate on positions. Although the leverage can go extremely high up to 125x, creating the question of stability for those taking these positions, it is key to note two things that create some stability: Binance requires funding rates to be met every eight hours, and they collect 0.5% fees in a USD insurance fund. These large leveraged positions, whether we agree with them or not, have been seen in many industries.

Valuation

Based on historical trends, the current price of Binance Coin at $15.15 is 75.8% below the target price from historical trends. In the past, we have seen two other times where it was close with such a dispersion, one at 70.3% above the target price and once 66% below the targeted price and both were corrected to another extreme. The fair target price calculated for BNB based on net profits using historical data through R Studio is in the range of $20.03-$33.24 (See Appendix A). There are some inherent risks of using this modeling process, as there are other factors that affect the price of BNB. It is also important to note that the value of the dividend would already be incorporated into the correlation trend of net profits. This dispersion most likely results from one of two factors, either investors are fearful of the company's management and strategies, or the market has overcorrected from the last sell-off.

Although the information is not easy to gather on these private companies, it was claimed that Binance profits were approximately $446 million but valued currently at $2.4 billion when this report was done. Coinbase, on the other hand, was projected to have brought in $456 million in profits (Akhtar, 2018) but it is uncertain that they hit this target through the slump in crypto at the end of 2018. Nonetheless, they were valued at $8 billion (Rooney, 2018). This puts Coinbase at a valuation of 2.33 times more than Binance.

Another competitor's valuation is for an exchange called Kraken; their valuation comes in at $4 billion Craft, 2019). Their daily revenue in 2019 has been $0.28 million compared to Binance's $3.48 million in revenue (Cao, 2018). Kraken is valued at 40% higher than Binance while bringing in about 8% of Binance's revenues.

Comparing Binance to its competitors, we are left to believe that the market is either greatly undervaluing Binance, overvaluing their competitors, or the market believes that Binance's management is unfit to run the organization. It was a consideration to project Binance's price out over the next eight quarters based on historical data and trends, but modeling is inherently risky when projecting from a short time period with so many uncertainties in Binance's environment. This also goes for other forms of projections we see through technical analysis.

The low correlation of cryptocurrency to other asset classes

Cryptocurrencies have an advantage in your portfolio due to the low correlation with other asset classes. Forbes states, "crypto-assets are appealing because they enjoy relatively low correlation to other asset classes, like bonds (negative correlation) and gold (zero correlation). In other words, crypto-assets can be an ideal way for investors to diversify a portfolio consisting of stocks and bonds." (Kulkarni, 2018). They also state that adding five percent cryptocurrency to your portfolio could add performance over 500 bps (5%) (Kulkarni, 2018).

Modern Portfolio Theory states the efficiency in investments can be managed by the diversification of asset classes (Tillier, 2013). Under this theory, adding a riskier asset can reduce your overall portfolio risk if the correlation to other assets is low.

If you added crypto to your portfolio

Using Portfolio Visualizer (See Appendix from 2010-2020), I ran three hypothetical analysis of portfolios not even diversified in crypto or other assets to show some of the benefits of adding cryptocurrency to your portfolio. One portfolio of just the SP500, one 50/50 of SP500, and the US aggregate bonds and one with 40/40 SP500, US aggregate bonds with a 20-ratio added to Bitcoin.

Even just adding Bitcoin and not other assets like Ethereum and Binance Coin, the final portfolio decreased the correlation of returns to the US market to .25. It increased the Sharpe Ratio from 0.7 to 1.33. It more than doubled the worst year experienced for returns but brought up the maximum yearly return from 31% to 284%. It is important to add that historical returns are not predictors of future returns. The key factor here is that it is another asset to add to your portfolio with a low correlation to other assets. Then adding to that, Binance coin has a low correlation to the rest of the cryptocurrencies space. The correlation between BNB and BTC reported between March and September 2019 was .55.

Appendix

A: Historic BNB Overvi

Filter

	Binance_Dividends_USD	Binance_Net_Profits_USD	BNB_Price_USD	price_estimate	Low_Price_estimate	High_Price_estimate	SD	PERCENT_Difference_from_target	COR_PROFIT_PRICE
1	1500000	7500000	1.50	1.088633	0.0000000	7.693952	6.605319e-08	37.78746	0.622585
2	40300000	201500000	21.96	29.247944	22.6426255	35.853263	6.605319e-08	-24.91780	0.622585
3	30000000	150000000	13.52	21.772663	15.1673444	28.377982	6.605319e-08	-37.90378	0.622585
4	33200000	166000000	12.93	24.095081	17.4897618	30.700400	6.605319e-08	-46.33759	0.622585
5	16200000	81000000	10.34	11.757238	5.1519192	18.362557	6.605319e-08	-12.05418	0.622585
6	10000000	50000000	5.83	7.257554	0.6522355	13.862873	6.605319e-08	-19.66991	0.622585
7	15600000	78000000	18.79	11.321785	4.7164659	17.927104	6.605319e-08	65.96323	0.622585
8	23838000	119190000	29.47	17.300558	10.6952393	23.905877	6.605319e-08	70.34132	0.622585
9	36700000	183500000	17.79	26.635225	20.0299058	33.240544	6.605319e-08	-33.20875	0.622585

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