MULTICOIN CAPITAL

BINANCE IS BLITZSCALING



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Multicoin Capital is a thesis-driven cryptofund that invests in tokens reshaping entire sectors of the global economy. We rigorously research blockchain protocols, teams, and market opportunities to deliver venture capital economics with public market liquidity.

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Disclosure

Multicoin has established, maintains and enforces written policies and procedures reasonably designed to identify and effectively manage conflicts of interest related to its investment activities. Multicoin Capital owns BNB tokens. Multicoin Capital abides by a "No Trade Policy" for the assets listed in this report for 3 days ("No Trade Period") following its public release.

Introduction

Binance's native token, Binance Coin ("BNB"), was created in July 2017 through an ICO by Binance, which has since become the largest spot exchange in the world. Multicoin initiated a long position in BNB in Q4 2018. We published our original <u>BNB investment thesis</u> in February, 2019. The price of BNB at the time of publication was \$10.06. We then joined Laura Shin on the Unchained podcast in March, 2019 to expand on the thesis and discuss the achievements of Binance and and the intrinsic value of Binance Chain.

Since that time, the Binance team has continued to execute at a phenomenal pace, and they're not showing any signs of slowing down. In fact, Binance is expanding to compete with every major crypto exchange around the world. This is visible through the evolution of their product suite:

- 1. <u>P2P onramp</u> for Chinese retail; this is directly competitive with Huobi's P2P offering
- 2. <u>Binance.US</u> for US traders; this is directly competitive with Coinbase
- 3. <u>Binance Futures</u> to compete directly with BitMEX, OKEx and other derivatives exchanges
- 4. <u>Lending</u> and <u>margin trading</u> to compete with Bitfinex and Poloniex, both of which have historically dominated P2P exchange lending
- 5. Launching Binance stablecoins (<u>BUSD</u>) to compete with Gemini (<u>GUSD</u>), itBit (<u>PAX</u>), Bitfinex (<u>USDT</u>), and Coinbase (<u>USDC</u>)
- 6. <u>Fiat onramps</u> in the long tail of nations to compete with localized exchange offerings

Binance is currently <u>blitzscaling</u>. Reid Hoffman and Chris Yeh <u>explain</u> the concept as:

"You accept the risk of making the wrong decision and willingly pay the cost of significant operating inefficiencies in exchange for the ability to move faster. These risks and costs are acceptable because the risk and cost of being too slow is even greater."

The Binance team is making the explicit decision that they want to be the central hub for all crypto-economic activity. They want to own <u>staking</u>, <u>borrowing</u>, <u>lending</u>, <u>options trading</u>, <u>futures</u> <u>trading</u>, <u>asset issuance</u>, <u>venture investing</u>, <u>spot trading</u>, <u>sovereign currency tokenization</u>, and more. They are building services so fast that it's impossible for their competition to keep up.

Binance is the best exchange business in the crypto ecosystem by a wide margin. Binance dwarfs the competition on trading volumes and breadth of products, while offering the lowest fees. And while it's true other exchange tokens have more favorable token economics, we expect Binance to iterate on the token design, adding more functionality to BNB over time. While token features can easily be copied (e.g. Binance can take all the best token economics from other exchanges), other teams can't as easily replicate Binance's network effects. Additionally, Binance has made multiple additions this year to enhance the value of BNB:

1. <u>Renewing</u> Community Coin of the Month voting

- 2. <u>Airdropping</u> tokens to BNB holders based on their cumulative holdings
- 3. <u>Launching</u> the Binance Launchpad lottery system
- 4. <u>Implementing</u> BNB as the base-layer token for Binance Chain (which we expect will soon yield staking rewards)
- 5. Extending the 25% discount window for fees paid with BNB on Binance.com
- 6. <u>Burning</u> the Binance team's BNB treasury supply

While other exchanges have attempted to copy Binance's innovations (<u>exchange tokens</u>, <u>IEO</u> <u>platforms</u>, <u>native DEX-chains</u>, <u>voting</u> on <u>listings</u>, etc), most of the other exchanges' efforts have yielded relatively little results. The natural question is why?

The answer is because Binance's existing network effects and market dominance cannot be easily replicated by challenger exchanges. For instance, with both margin trading *and* derivatives trading on the same platform, Binance could potentially allow traders to utilize the full balances held in their Binance accounts to maintain margin requirements across both markets/products. The underlying tokens can also simultaneously be staked in <u>Binance Staking</u>, earning traders an additional yield. This is an example of why Binance having many *seemingly* isolated products is in fact furthering their strong network effects.

As we've written about before, the team at Binance is creating a powerful conglomerate effect. They have used the combination of their own base-layer chain in <u>Binance Chain</u>, their token sale platform in <u>Launchpad</u>, their market dominant <u>exchange</u>, their <u>derivatives platform</u>, the <u>Binance</u> <u>DEX</u>, their <u>venture fund</u>, their U.S. presence in <u>Binance.US</u>, and their various fiat onramps in other nations to build what is arguably the single most important company in the crypto space. All of the new utility being announced for BNB further reinforces our original thesis that BNB will capture most of the value of the conglomerate Binance is building.

Binance's Execution

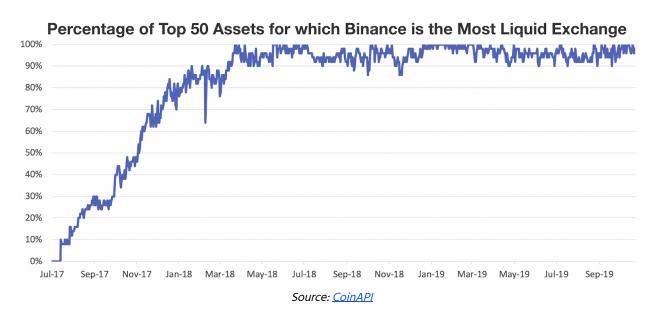
In this section, we'll cover Binance's dominance in spot trading, their rapid product expansion since we published our report in February, and the power of Binance cross-selling financial products. We'll conclude the section by discussing how Binance puts traders first, including covering losses of the hack in May and tying up the initial capital for the Binance Futures insurance fund.

Dominance in Core Spot Trading

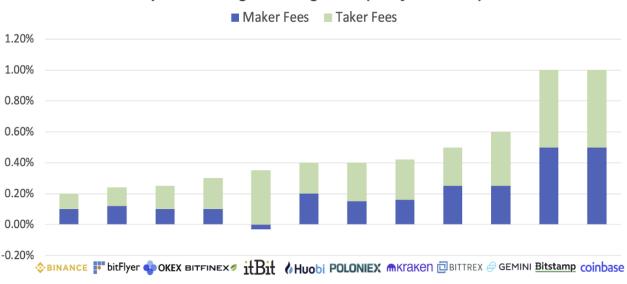
In March, Bitwise <u>published</u> a detailed report on crypto exchange volumes that was shared with the SEC. In the report, Bitwise concluded not only that Binance has the most reliable liquidity of all the exchanges, but also that they had almost 3x the volume of the next largest competitor.

Since releasing our February report, Binance has retained its market leading dominance in the crypto spot trading market. Binance is currently the top exchange for **98% of the top 50 traded**

tokens. This means that 49 of the top 50 assets trade more daily spot volume on Binance than any other "Real 10" exchange (Bitfinex, Bitflyer, Bitstamp, Bittrex, Coinbase Pro, Gemini, itBit, Kraken, and Poloniex). The only exception is Bitcoin SV (\$BSV), which Binance delisted in April, 2019. As shown in the chart below, Binance's liquidity grew rapidly after they launched the exchange in July, 2017 and they have maintained their dominance.



Binance's dominance in spot trading allows them to offer the lowest trading fees of all major exchanges, furthering their moat. The Binance team is executing masterfully on the Amazon strategy of "your margin is my opportunity."



Spot Exchange Trading Fees (entry level tier)

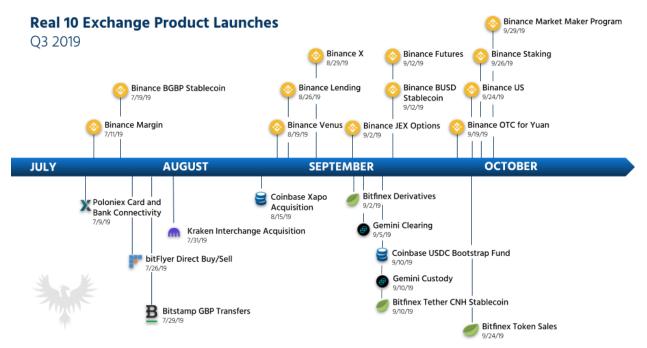
Source: Exchange Websites, The Block

Binance's largest competitors are <u>losing</u> market share and being forced to significantly <u>raise</u> their fees further to keep revenues steady, which further increases the relative attractiveness of the Binance exchange for traders. Meanwhile, Binance continues to lower fees. Some examples:

- 1. Binance <u>extended</u> the 25% trading discount for paying with BNB tokens for another year (the original schedule would have lowered the discount to 12.5% in July, 2019).
- 2. Binance DEX launched with lower fees than those on the centralized exchange.
- 3. Binance is currently providing 50% discounted fees on Binance Futures for three months.
- 4. Binance.US is incentivizing liquidity by <u>offering</u> zero trading fees through October.
- 5. Binance Futures <u>reduced</u> its liquidation fee from 0.5% of liquidated notional to 0.3%.

Rapid Product Expansion

Despite commanding the position as the top spot exchange, Binance has continued to launch new product after product. Binance is moving at a breakneck pace for an organization at this scale. In Q3 alone, Binance launched more products than all of the other Real 10 exchanges combined:



Sources: Kraken blog, Coinbase blog, Bitfinex Blog, Gemini blog, Bittrex News and Announcements, Poloniex blog, itBit blog, Binance blog, Bitstamp News and updates, bitFlyer USA blog, CoinDesk, The Block

- 1. <u>Binance Futures</u> (note that this has quickly become the <u>2nd most liquid futures market</u>)
- 2. <u>Lending</u>
- 3. OTC offering for Chinese traders to onboard into crypto with RMB
- 4. Margin trading
- 5. <u>Staking support</u> (note that this requires zero work on the part of customers)
- 6. <u>Program to attract more market makers</u>

- 7. GBP and USD denominated stablecoins
- 8. Binance.US: Binance's US domiciled subsidiary which is subject to US regulations
- 9. Binance X
- 10. Venus: a platform for issuing sovereign currencies on Binance Chain (a response to Facebook's Libra project)

Decentralization and team autonomy is a key ingredient in this strategy. The decentralized nature of Binance's organization allows team divisions to launch and integrate new products at a rapid pace. Changpeng Zhao (CZ), the CEO of Binance, has spoken publicly before about the fact that Binance is made up of small, autonomous teams operating across the globe:



"So far, each team's doing guite well because the teams are relatively independent and relatively self-sufficient. But overall, I personally don't get involved in a lot of the initiatives we have now, so I've actually don't know what's going on in all of Binance. I do have a high level of understanding, but on the day-to-day basis the team just carries on with it."

What's most impressive is that while Binance continues to launch products at a high velocity, none of the products have been successfully manipulated or attacked. There have been instances on other exchanges of pricing algorithm attacks that have unfairly liquidated traders, flash crashes on margin markets that impaired lenders, and leveraged tokens that have traded directionally the wrong way. We have seen no evidence that Binance's products have suffered any attacks, and traders seem guite happy with the functionality of all of Binance's products, which is a strong indicator of working internal quality controls. We see validation of trader confidence in Binance products by looking at Binance Futures's market share: it's 5.8x higher on Nov. 4 (16.2%) than it was at launch on Sep. 12 (2.8%).



Binance Futures Daily Market Share %

The Power of Cross-Selling

Like many existing exchanges, Binance's core spot trading business has been its most profitable product throughout its two-year history. Now, they are launching new products at an accelerated pace because there is tremendous value in cross-selling many of the services they offer. For example, there is a powerful lock-in for traders by trading spot, margin, and derivatives on one exchange: cross margining assets across many types of positions. While this feature is not yet live, we expect Binance to launch it soon, further increasing the strength of the Binance ecosystem's network effects.

Another simple example is staking. A Binance trader can hold assets on the exchange with no lock-ups and earn yield on her assets. If she wants to liquidate her position immediately due to exogenous events in the crypto markets, she can do so right away. This eliminates the wait time of:

- 1. Unstaking her coins
- 2. Sending a transaction on the blockchain
- 3. Waiting an entire confirmation cycle for an exchange to accept her deposit
- 4. Finally selling her coins

Offering native staking incentivizes traders to hold assets on Binance and allows them to trade fast, creating more of a lock-in for Binance and more liquidity on the exchange.

Because liquidity aggregates into large pools, exchanges are best positioned to offer new financial products. Binance is aggregating capital in ways we've never seen before. Why would traders go to:

- 1. Poloniex to margin trade,
- 2. Bitfinex to lend,
- 3. BitMEX to trade perpetual swap contracts,
- 4. OKEx to trade futures,
- 5. Deribit to trade options,
- 6. Bittrex to invest in an IEO,
- 7. FTX to block trade OTC,
- 8. Gemini to print a stablecoin,
- 9. Coinbase to onramp into crypto with USD,
- 10. Bitstamp to onramp into crypto with EUR, or
- 11. Huobi to onramp into crypto with RMB

... if they can do it all through one interface with one liquidity pool and lower fees?

Due to economies of scale and the fact that Binance is one of the most profitable companies in crypto, the company can offer so many financial products in a cohesive package that virtually no one else can. This includes both crypto-native financial services products (staking, DEX-chain, IEOs, P2P OTC, stablecoins, etc) and traditional financial services products (borrow / lend, options,

futures, etc).

| Binance Quarterly Net Profits and Spot Volumes | | | | | | | | | | | |
|------------------------------------------------|------------|---------------|----|---------------------|----------------------|--|--|--|--|--|--|
| Quarter | Net Profit | | | pot Trading Volumes | Profit / Spot Volume | | | | | | |
| Q3 2017 | \$ | 7,395,000 | \$ | 4,094,243,794 | 0.18% | | | | | | |
| Q4 2017 | \$ | 200,010,143 | \$ | 78,763,349,302 | 0.25% | | | | | | |
| Q1 2018 | \$ | 150,093,226 | \$ | 227,813,686,148 | 0.07% | | | | | | |
| Q2 2018 | \$ | 163,484,787 | \$ | 149,451,960,088 | 0.11% | | | | | | |
| Q3 2018 | \$ | 84,994,076 | \$ | 104,592,795,347 | 0.08% | | | | | | |
| Q4 2018 | \$ | 47,334,295 | \$ | 71,442,494,437 | 0.07% | | | | | | |
| Q1 2019 | \$ | 77,967,978 | \$ | 66,650,384,697 | 0.12% | | | | | | |
| Q2 2019 | \$ | 119,189,647 | \$ | 161,813,743,638 | 0.07% | | | | | | |
| Q3 2019 | \$ | 185,982,298 | \$ | 112,536,558,490 | 0.17% | | | | | | |
| Totals | \$ | 1,036,451,450 | \$ | 977,159,215,941 | 0.11% | | | | | | |

Sources: <u>CoinAPI</u>, <u>The Block</u>

Looking at Binance's profits in Q3 2019, we can see why the new products are so important to the overall business. In Q3 2019, Binance burned \$37.1M of BNB, implying profits of \$185.9M—Binance's 2nd most profitable quarter (the largest coincided with the peak of 2017 bubble). Binance produced these profits despite relatively flat spot volumes, implying that the new products are producing meaningful revenues and profits.

Putting Traders First

On May 7, 2019 Binance suffered a <u>hack</u> and lost ~7,000 BTC, worth ~\$40M at the time, of customer deposits. Binance immediately alerted its customers and suspended withdrawals. In the following days, Binance made it crystal clear that no user would lose funds as a result of the exploit. Instead, Binance would tap into its <u>SAFU fund</u>—an insurance fund that Binance deposits 10% of all trading fees into—to cover the losses.

Exchange hacks happen in crypto. What an exchange does in a response to a hack is critical. In the past, exchanges have <u>shut down</u>, issued equity tokens to <u>try</u> (and <u>fail</u>) to refund customers, and filed for <u>bankruptcy</u> as a result of being hacked. In other types of attacks, other exchanges have failed to make traders whole. For example, Poloniex, which allowed margin trading for CLAM tokens, was <u>hit</u> with a flash crash and then socialized losses across all lenders on the platform. This resulted in an 1,800 BTC (\$14.5M) loss for lenders, of which only <u>10%</u> has been paid back thus far. OKEx socialized losses in August, 2018 after a trader was <u>liquidated</u> on a \$460M position.

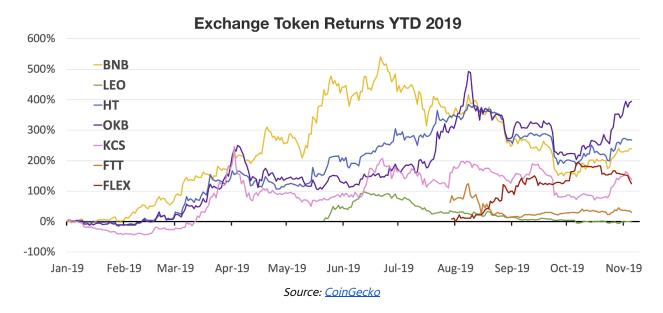
Lastly, it appears to us that Binance has bootstrapped its futures insurance fund by supplying the <u>initial capital</u>. Insurance funds on futures platforms help exchanges avoid socialized clawbacks, whereby profitable traders would otherwise have to sacrifice some of their gains to cover losses suffered by other traders. We believe that Binance locked up balance sheet capital in order to

protect traders on the Futures platform. Because Binance is profitable and therefore has a robust balance sheet, they have the capital to offer guarantees like this to traders.

The Emergence of the Challenger Exchange (Token)

A wave of credible teams launched new exchanges in 2019. <u>CoinFLEX</u> launched its physically delivered futures exchange. <u>Alameda Research</u> launched <u>FTX</u>, a crypto derivatives exchange. <u>Blockchain.com</u>, a conglomerate wallet / explorer company, recently launched <u>THE PIT</u>.

There are likely a few reasons for the uptick in exchange launches, after a relatively quiet dearth of exchange launches in the second half of 2018. First, exchanges have historically been the largest profit centers in the crypto space, and so everyone can see the large financial opportunity in front of them. Given how attractive the returns have been in the exchange token sector YTD 2019 (median 159% across exchanges), exchange token appreciation is another compelling reason for groups to launch exchanges. As a result, we're seeing a lot of new exchange tokens printed as well.



Furthermore, traditional financial institutions are entering the space and offering crypto-native financial services. For example, Bakkt launched in September with physically settled futures. CME is planning to launch options products in Q1 2020. These developments legitimize the space and will likely enable new startup exchanges to raise capital and compete.

Binance's Willingness to Copy Competitors

"Good Artists Copy. Great Artists Steal." - Steve Jobs

We <u>agree</u>. Binance has repeatedly demonstrated that they're not afraid to copy all of the best products from everyone else. The manifestation of this can be seen in the debut of Binance Futures.

Binance copied BitMEX's perpetual swap documentation <u>verbatim</u>, and when CZ was <u>called out</u> for doing so by BitMEX's CEO, <u>CZ didn't blink an eye</u>.

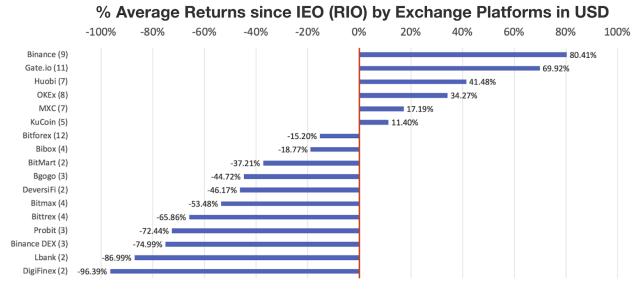
We can reasonably expect Binance to copy any new products from competitive exchanges that gain traction. This limits the competition's ability to scale quickly. For example, Bitfinex recently announced a compelling <u>affiliate program</u>. Launching a similar affiliate program is a logical next step for Binance. Challenger exchanges have launched <u>leveraged tokens</u>, <u>Initial Futures Openings</u>, and other novel products. If those products prove to be popular, we expect Binance to directly compete.

Binance's strategy of fast-following is already paying dividends. Two weeks after debuting, Binance Futures is the <u>second</u> most liquid derivatives exchange on the planet. When Binance lending <u>went</u> <u>live</u> in late August, BNB lending was fully subscribed in 16 seconds, USDT reached the limit in 3 minutes, and ETC was closed in 9 minutes. CZ <u>announced</u> in Binance's Q3 quarterly BNB report that the P2P OTC platform facilitated \$1.5M of volume in the first 24 hours of trading.

Competitive Landscape

Of course if Binance can copy all of the other exchanges, then others can copy Binance's innovations as well. However, while others can copy, they cannot do so as effectively as Binance can. Below we'll examine these dynamics across a few key areas:

- Building a DEX-chain with the exchange token as the native asset Binance Chain mainnet went live in March 2019. <u>Other exchanges</u> have since announced plans to launch their own blockchains, and to port over their native tokens to those blockchains. However, none of the other exchanges have launched a chain yet or shared a credible timeline for when their chains will launch.
- 2. Facilitating IEO Offerings While 2017 was the year of ICOs, 2019 has been the year of IEOs (short for Initial Exchange Offerings). Binance formalized IEOs with the announcement of Binance Launchpad in January 2019. Many exchanges have since launched IEO platforms of their own. Examples include Bitfinex, Bittrex, KuCoin, OKEx, and Huobi. We think that because Binance is so dominant they can be more selective with the projects they list (because many more teams apply to Binance). As a result, returns on invested capital on Binance Launchpad have been higher than those held on other exchange platforms.
- **3.** Listing more assets As other exchanges have started to see their market share (and thus revenues) fall, they've followed Binance's lead and have expanded the scope of the assets they list. For example, Coinbase only listed three assets during the bull market of 2017: BTC, ETH, and LTC. Coinbase then listed 13 assets from Nov 2018 to Dec 2018. However, Binance maintains its position as the most liquid exchange for these assets despite competitors listing them.



Source: <u>CryptoRank</u>; Note: this calculation takes the total return of each IEO (price Oct. 20 vs. IEO price) on every exchange platform and averages the ROIs of each project

Summarizing, it's clear that Binance is the dominant exchange business in the crypto industry. They're not only launching products faster than everyone else, but when someone beats them to market with an innovative product, they're willing and able to quickly respond and compete. On the other hand, there are several cases in which other exchanges have tried and failed to copy Binance's innovations.

The Equation of Exchange Tokens

We've been doing a lot of work benchmarking tokens because it's a sector we find <u>extremely</u> <u>compelling</u>. Our thesis broadly on exchange tokens is that the tokens will capture a growing percentage of the value that the exchanges create. We evaluate the quality of an exchange token across two dimensions:

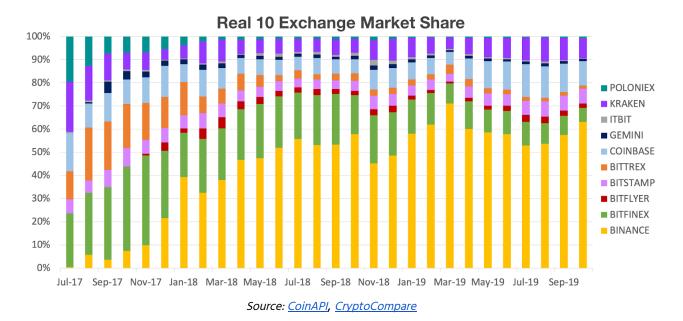
- 1. The value created by the exchange
- 2. The degree to which the token captures that value

We can mentally model the value capture of the token as a product of these variables. We call this the **equation of exchange tokens** (and no, we don't mean the MV=PQ equation of exchange).

Exchange token network value = value created by exchange * efficiency of token value capture

What we mean by "value created by exchange" is the success of the business itself. To provide a simple example, Binance has a much larger "value created by exchange" than an exchange like ZB does. Indicators we look for here include: revenues, daily users, website traffic, breadth of product offerings, community credibility, volumes, liquidity, management team ability, etc. While it's

impossible to quantify many of these, we believe that Binance creates the most value of any exchange in the space. In fact, we've yet to find any exchange that comes close.



The efficiency of value capture is the token's ability to grow in price as the exchange grows market share dominance. On value capture, we've identified seven key traits to evaluate efficiency, and have ranked each token individually on all seven characteristics. In the table below are the rankings: 1 is the best rating for each feature, and 7 is the worst rating.

| Efficiency of Value Capture Rankings | | | | | | | | | | | |
|--------------------------------------|-------------------------------------------------|---------------------|------------------|-------------------|---------------------|------------------|----------------------------------------|-----------------------------|--|--|--|
| Exchange Token | Daily Exchange Volume (24h) | Buyback and burn | Cash Flows | Velocity Sinks | Trading Discount | Voting Rights | Burn-to-price ratio (current float) | Inflation / Distribution | | | |
| 📀 BNB | Spot: \$1,660,508,767 Deriv: \$1,292,305,293 | 7 | 3 | 5 | 4 | 2 | 4.68% | 1 | | | |
| Reo LEO | Spot: \$148,807,665 Deriv: \$406,358 | 2 | 2 (call options) | 3 | 7 | 7 | 2.53% | 4 | | | |
| 🔥 нт | Spot: \$271,203,988 Deriv: \$3,656,516,133 | 6 | 1 | 1 | 1 | 1 | 17.57% | 5 | | | |
| FTT | Spot: \$18,941,368 Deriv: \$292,506,752 | 1 | 6 | 2 | 2 | 4 | 8.14% | 7 | | | |
| FLEX | Spot: \$976,138 Deriv: \$469,186,081 | 3 | 5 | 7 | 6 | 3 | 34.31% | 6 | | | |
| 🔹 окв | Spot: \$127,418,459 Deriv: \$4,462,726,793 | 4 | 7 | 5 | 5 | 5 | 8.19% | 3 | | | |
| КСS КСS | Spot: \$34,401,478 Deriv: \$11,705,536 | 5 | 4 | 4 | 3 | 6 | 2.44% | 2 | | | |

Sources: CoinGecko, Exchange Websites, Coinfi

- 1. **Buyback-and-burn** There are a few factors we take into account here: the frequency of burns (hourly, daily, quarterly, etc), percentage of revenues/profits used, and whether or not the exchange actually buys the tokens before burning them.
- 2. **Direct cash Flows** There are a few ways exchange token holders can get cash flows distribution of exchange revenues, staking / delegation rewards, & validating on a DEX-chain.
- 3. **Velocity sinks** These include mechanics like staking tokens for discounts and referral fees, but they also include airdrops (see Binance JEX token, Huobi DPOS rewards), collateral for futures, and other lockup incentives.
- 4. **Trading discount** We believe that trading discounts with tiers are more effective for value capture than a flat trading discount for paying with a token. For example, traders who hold more LEO receive a bigger discount on Bitfinex. A higher BNB holding does the same on Binance.
- 5. **Voting rights** This is one metric we think exchanges can improve. There's real value in holding the token in large quantities to be able to vote for new asset listings (especially in Binance's case, because it is the largest and most liquid exchange). Today, Huobi offers the best voting rights.
- 6. **Burn-to-price ratio** This is the most important metric. This is essentially calculating annual burn in USD terms / current token market cap. Other than changing the burn mechanics, this is impossible to change because market cap cannot be adjusted by the exchange.
- 7. **Inflation / distribution** Is the team incentivized for the price of the token to go up (e.g. do they hold a lot of it), will inflation suppress the price, and what do lockups look like for early investors?

BNB's Efficiency of Token Value Capture

After evaluating BNB against other exchange tokens, it's clear that Binance's token economic structure is suboptimal relative to several peers:

 Binance doesn't literally buy back tokens from the public market and burn them; rather, they are burned from the treasury every quarter. With that being said, we argue that it doesn't matter because they're not selling trading fees paid in BNB on the open market (so it nets out to zero). CZ recently commented on this in Binance's <u>9th BNB burn report</u>:

> "Binance does not "buy back" BNB for the burn. There are some other communities that think conducting a "buy-back" is better. But think about it: a platform's main income should already be in their native platform token, and the only way to get

the "cash" to do a "buy-back" is to sell their tokens first. So, to do a "buy-back," they must sell first, then buy back. — We believe this does not, in fact, achieve anything; it only indicates that those platforms are not holding their own tokens."

- 2. There are few cash flow components to BNB: the Binance JEX airdrop program and the referral fee program. We believe it's a logical next step for Binance to introduce BNB staking on Binance Chain some time in the next 12 months.
- 3. Binance has the same velocity sink as other exchanges: holding BNB in large quantities to get discounted fees on the exchange. We think that Binance should allow traders to use BNB as collateral for futures contracts, increasing the strength of the velocity sink. BNB has a long history of retaining value, a large market cap, and high daily liquidity (especially as a base pair against other assets), which makes it good collateral. Moreover, many large traders already hold BNB for discounts; allowing them to use BNB as collateral increases their capital efficiency, driving more liquidity to Binance futures and away from competitive futures venues.
- 4. Binance recently brought back the Community Coin of the Month voting program. BNB holders also vote on Binance DEX listings. While this is a good start, we'd like to see more voting power. One addition that could be interesting here is offering BNB holders the ability to vote on Binance-branded fiat to crypto exchanges (including Binance Jersey, Binance Singapore, and Binance.US).

Why Value Created by Exchange Is More Important Than Efficiency of Token Value Capture

Binance does not have the best value capture mechanisms for BNB when compared with other exchanges. This has become clear over the past six months as we've seen challenger exchanges launch tokens with novel economics. Some examples:

- 1. Bitfinex burning LEO tokens in real-time using VWAP,
- 2. FTX offering FTT as futures collateral,
- 3. CoinFLEX incentivizing liquidity with trade-driven mining,
- 4. Huobi providing PoS stake cash flows to HT holders who lock up tokens, and
- 5. KuCoin paying trading fee revenues to KCS holders on a daily basis

Each of these teams considered BNB's individual mechanics and thought of ways to improve on each of them. As a result, many exchange tokens offer more attractive token value capture mechanisms than BNB does today.

With that being said, we believe it is dramatically easier for Binance to improve token economics than for other exchanges to replicate Binance's success. Tomorrow, Binance could:

1. Offer BNB to be used as futures collateral,

- 2. Leverage a work token model for Binance Chain,
- 3. Require users who want to earn staking rewards to hold BNB tokens, and
- 4. Introduce an affiliate program which incentivizes new traders to hold BNB

On the other hand, the other exchanges can't flip a switch tomorrow and become the most dominant exchange in the crypto industry. We expect Binance to leverage many of the best features pioneered by other exchanges to improve BNB's utility over time.

Conclusion

Binance's business has grown tremendously since we published <u>Binance Coin (\$BNB) Analysis and</u> <u>Valuation</u> in February. Historically a spot only exchange, Binance has now added futures, margin, lending, and options. Additionally, the company has started adding crypto-native financial products (staking, stablecoins, Binance Chain, etc.). We have never seen a financial services organization ship new products and services at such a pace. This is what happens when value transfer becomes a global, simple, open API (as opposed to legacy systems where value transfer is complex, slow, expensive, and highly fragmented).

We continue to be impressed with Binance's ability to ship new products and out execute the competition in every dimension. Even more impressive than Binance being able to launch products at a fast pace is that many if not all of the products have been successful:

- 1. Binance Futures is the second most liquid derivatives exchange globally.
- 2. Binance Lending <u>was</u> fully subscribed in 10 minutes for its first phase.
- 3. Binance P2P trading in China <u>reached</u> \$1.5M on the first day of trading.
- 4. Binance U.S. has quickly grown <u>24h volumes</u> to <u>\$32M+</u> (in a linear path upwards). One month after launch, it had <u>more</u> 24h volume than itBit and Gemini.
- 5. Binance Launchpad IEOs have <u>returned</u> an average of 80.41% (as of Oct 20), a higher rate of return than all other IEO platforms.
- 6. Binance DEX has more <u>trading volume</u> than <u>every other DEX</u> on the planet.

We now have empirical evidence that Binance has been rewarded handsomely for its ability to launch new products -- Binance's Q3 2019 profits of \$185.9M were the second highest ever, despite spot volumes falling 31%. As a result, we expect Binance to double down and continue to build and launch new products at an accelerated pace.

The exchange token market has changed dramatically since we published our February report. We've seen an explosion of challenger exchanges emerge and launch exchange tokens that are directly competitive with BNB. While we think many of the new exchanges offer compelling token economics, it will be very hard for the exchanges to compete effectively with Binance. Binance's network effect and dominance continue to grow every day. We think that if/when Binance adds support for cross margining positions, their network effect will grow even larger. As that happens, Binance will continue to add new functionality to the BNB token over time as they continue to launch new products and improve existing ones. As challenger exchanges continue to innovate on token economics and launch clever features, Binance will likely continue to replicate them almost immediately.

Given the current state of the exchange token landscape, Binance's market leading position, their willingness to copy competitive products, and their history of tweaking the token economics of BNB to provide more value for token holders, we believe that BNB is sharply undervalued at current prices. At the time of publication, BNB's market cap is \$3,216,288,747, and it is ranked 7th in terms of total market cap (excluding USDT).