An independent review of **Binance** (BNB)

9 May 2019 (updated from 31 Jan 2019) - Lennard Neo

Picolo Research is an independent research-house. The company has not received any remuneration (cryptocurrency or otherwise) in preparing this analysis.
BINANCE (BNB)

Binance uncomplicated growth story continues on the back of 66% increase in quarterly profits

Company Overview

Binance started in Jul 2017 and is an exchange platform for crypto to crypto transactions. It is one of the largest exchanges by trading volume, serving over 450 token pairs for trading.

The exchange boasts a matching engine that can perform 1.4m transactions per second (TPS) and is known for its high liquidity. Behind the platform is a professional team of 800+ employees with an influential CEO Zhao Changpeng at its helm.

Updates from the previous report (Jan 2019)

Picolo Research has updated our valuation on Binance taking into account the firm’s last quarter developments and current market conditions. Having seen a significant rise in BNB price since Jan 2019, our analysts revisited the valuation and highlighted several changes from the previous report.

- Updated target price of BNB to $30.11 from $10.08 prior
- Valuation methodology updated to reflect Binance additional expansion and service offerings
- Drop in correlations between BNB and BTC/ETH, signifying divergence between the tokens
- A significant rise in MV/Vol multiple (from 3.67 to 8.10), with markets perceiving higher valuations of exchanges on the back of IEO hype
- Number of employees doubled from 400+ to 800+ signalling aggressive hiring for future growth
- Regulatory threat not as significant as the firm strengthens its compliance department and continual expansion efforts in different jurisdictions

Birds-Eye View

- **Rating:**
  - Potential: 75%
  - Product: 75%
  - Management: 75%
  - Token Utility: 75%
  - Community: 75%

**Buy**

Target Price: $30.11
(45% upside)

**General**

- **Ticker:** BNB
- **Price** (8 May 2019): $20.75
- **1y price range:** $4.53 - $25.01
- **1y Avg BNB:** $73.5m
- **Circulating Token Supply:** 140,345,602
- **Market Cap** (8 May 2019): $2,930m

**Platform Info**

- **Token Type:** Utility
- **Sector:** Exchange/Finance
- **Regional Focus:** Global
- **30d Exchange Volume:** $26.9b
- **CEO:** Zhao Changpeng
- **Website:** [Click Here](#)
Thematic Views

Binance Chain the Catalyst. The launched of Binance Chain, its native blockchain, in April 2019 emphasise Binance’s vision of empowering a decentralised ecosystem. A week later, the launch of Binance DEX (Decentralized Exchange) follows suit with several projects (Mithril, Red Pulse, Giftto) announcing that they will migrate over to Binance Chain. This creates a shift of power within the top 10 blockchain infrastructure projects and adds another element to the utility of Binance token (BNB). Our analysts foresee a significant spillover effect of the market share on infrastructure projects into Binance Chain, which eventually provides another dimension of valuation on the token.

Growing profits on top of increasing trade volumes – Binance saw a 66% jump in QoQ profits in Q1 2019, the first positive gain after a consecutive decline in profits in the past five quarters. This was back by increased total trade volumes, which has picked up significantly in 2019 from $500b in Dec 2018 to all-time highs of $1,240b in Apr 2019. In addition, CME Bitcoin Futures volume also saw a huge surge with a 3x gain on the number of contracts traded in Apr 2019 as compared to the prior month, lifting sidelined monies into the market. More importantly, Binance market share of trade volumes has remained stable above the 30% level relative to its peers, which further emphasise its footing as a dominant crypto exchange platform for investors.

Launchpad and DEX a source of direct and indirect revenues – Binance recently unveiled guidelines for their listing process on Binance DEX. Concurrent to that, a listing fee of 2,000 BNB (~$44k) will be charged to the project upon having a successful vote proposal. Indirectly, both Launchpad and DEX have generated a significant amount of trading volumes, which in turn translate into trading revenue for Binance. The first 7 days of listing volume for a Launchpad project post-IEO such as BTT, FTT and CELR compromise of 11.2%, 6.3%, 6.3% of total Binance Volume respectively, which easily places them as the top 3 trading coins over that same period. That is approximately half of BTC/USDT (12.5-15%) average daily trading volume on Binance.

Competitor Analysis

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Binance</th>
<th>Huobi</th>
<th>Kucoin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure Type</td>
<td>Crypto to Crypto Exchange</td>
<td>Crypto to Crypto Exchange</td>
<td>Crypto to Crypto Exchange</td>
</tr>
<tr>
<td>Symbol</td>
<td>BNB</td>
<td>HT</td>
<td>KCS</td>
</tr>
<tr>
<td>Token Utility</td>
<td>Trading fee discount, Quarterly buyback, Currency, IEO participation</td>
<td>Trading fee discount, Quarterly buyback, Liquidity insurance, IEO participation</td>
<td>Trading fee discount, Quarterly buyback, IEO participation</td>
</tr>
<tr>
<td>Initiation Year</td>
<td>Jul 2017</td>
<td>Jan 2014</td>
<td>Oct 2017</td>
</tr>
<tr>
<td>Exchange Volume (Past 30d)</td>
<td>$26,880m</td>
<td>$20,190m</td>
<td>$760m</td>
</tr>
<tr>
<td>Token Price</td>
<td>$20.75</td>
<td>$2.40</td>
<td>$1.06</td>
</tr>
<tr>
<td>Market Cap</td>
<td>$2,930m</td>
<td>$120m</td>
<td>$95m</td>
</tr>
<tr>
<td>No. of tokens listed</td>
<td>476</td>
<td>435</td>
<td>406</td>
</tr>
<tr>
<td>Trading Fees</td>
<td>Maker: 0.1%</td>
<td>Maker: 0.2%</td>
<td>Maker: 0.1%</td>
</tr>
<tr>
<td>Returns since listing (vs USD)</td>
<td>206.50%</td>
<td>57.9%</td>
<td>53.1%</td>
</tr>
</tbody>
</table>

Figures as of 9 May 2019, source: CMC
Valuation

Picolo adjusted several parameters and adopted the sum of the parts valuation to reflect Binance additional service offerings. We adopted a three-prong approach to the fundamental valuation of BNB to determine the intrinsic value of the token. The three parameters include:

1. Value derived from token discounts
2. Value derived from token repurchases and BNB burnt
3. % proportion of market share derived from Binance chain as an infrastructure project

Our analysts assumed an implied quarterly growth rate of 22.8% and a quarterly discount factor of 6.8% (30% annualised), and after adding the parts together, we derived an intrinsic valuation of $33.79. In addition, a relative valuation was utilised to determine market sentiments of comparable exchanges. Based on the industry Market Value/Volume multiple (MV/Vol), BNB is valued at $26.43.

Overall, an average of both fundamental and relative valuation was taken to derive a value of $30.11 per BNB token, which represents a 45% upside.

Key Risks

- Exchange susceptible to hacks with the recent one occurring on 8 May 2019
- Significant technical and fundamental deviation in the broader markets heightens price volatility
- Binance active acquisition hunt could create dilution and dent its treasury

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**Parameters Inputs**

- **Initial Supply BNB**: 200m
- **Avg 30d Volume**: 23,074,373, 307
- **% Profits to buyback BNB**: 22%
- **Trading Fees**: 0.2%
- **Growth in Volume Ann**: 127.6%
- **Discount Factor Ann**: 30.0%
- **Discount Factor QoQ**: 6.8%
- **Terminal Value growth Ann**: 2.9%
- **Terminal Value growth QoQ**: 0.7%

**Proft Margin**: 73.1%

**Growth Rate**

- **2019**: 16.8% to $21.96
- **2020**: 19.8% to $24.52
- **2021**: 22.8% to $27.96
- **2022**: 25.8% to $31.34

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**Balance Chain Comparables**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Market Cap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ether</td>
<td>$8.94</td>
</tr>
<tr>
<td>EOS</td>
<td>35.66</td>
</tr>
<tr>
<td>Cardano</td>
<td>76.5m</td>
</tr>
<tr>
<td>NEO</td>
<td>587m</td>
</tr>
<tr>
<td>Ontology</td>
<td>526m</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Currency</th>
<th>Market Cap</th>
</tr>
</thead>
<tbody>
<tr>
<td>XRP</td>
<td>$12.59m</td>
</tr>
<tr>
<td>Stellar</td>
<td>$1.75m</td>
</tr>
<tr>
<td>TRX</td>
<td>$1.61m</td>
</tr>
<tr>
<td>Tether</td>
<td>$976m</td>
</tr>
</tbody>
</table>

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**Price Sensitivity Table**

<table>
<thead>
<tr>
<th>Exchanges</th>
<th>Symbol</th>
<th>Tokens in Circulation</th>
<th>Total Supply</th>
<th>Token Price</th>
<th>Market Vol (Total supply)</th>
<th>Ad Val Volume (24H)</th>
<th>MV/Vol multiple</th>
<th>Implied Token Price</th>
<th>Potential Upside</th>
</tr>
</thead>
<tbody>
<tr>
<td>Binance</td>
<td>BNB</td>
<td>140,345,002</td>
<td>180,345,002</td>
<td>$20.75</td>
<td>3,398,711,242, 614,786,371</td>
<td>6.36</td>
<td>$20.45</td>
<td>27%</td>
<td></td>
</tr>
<tr>
<td>DEX</td>
<td>DBX</td>
<td>300,000,000</td>
<td>1,000,000,000</td>
<td>$1.61</td>
<td>1,010,000,000, 1,048,438,510</td>
<td>1.46</td>
<td>$3.94</td>
<td>43%</td>
<td></td>
</tr>
<tr>
<td>Huobi</td>
<td>HT</td>
<td>50,000,000</td>
<td>50,000,000</td>
<td>$2.40</td>
<td>1,200,000,000, 609,057,932</td>
<td>1.97</td>
<td>$9.86</td>
<td>311%</td>
<td></td>
</tr>
<tr>
<td>KuCoin</td>
<td>KCS</td>
<td>89,059,415</td>
<td>179,059,415</td>
<td>$1.61</td>
<td>190,038,980, 25,006,505</td>
<td>7.97</td>
<td>$1.08</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Liquid (pre known as Quoine)</td>
<td>GASH</td>
<td>300,000,000</td>
<td>1,000,000,000</td>
<td>$0.12</td>
<td>123,144,000, 6,002,301</td>
<td>18.65</td>
<td>$0.05</td>
<td>57%</td>
<td></td>
</tr>
<tr>
<td>Bittrex</td>
<td>BTMX</td>
<td>675,411,000</td>
<td>10,000,000,000</td>
<td>$0.10</td>
<td>1,027,000,000, 84,364,700</td>
<td>12.17</td>
<td>$0.07</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td>Bitfinex</td>
<td></td>
<td></td>
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</table>

**WACC**

- **4.8%**
- **5.8%**
- **6.0%**
- **7.8%**
- **8.8%**

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**Growth Rate**

- **22.8%** to $44.02
- **25.8%** to $46.44
- **28.8%** to $52.24

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**Price Volatility**

- **21.96** to $33.79
- **24.52** to $31.34

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**Implied Profit Margin derived from Nasdaq OEN**
Conclusion

Picolo Research analysts conclude that BNB will continue to outperform on the back of an uncomplicated growth story. Therefore, we re-affirm our ‘Buy’ rating on Binance with a target price of $30.11, representing a 45% potential upside. The reasons listed below ascertains our rating.

- Binance Chain adding an element of growth for BNB token

- Launchpad will continue to enhance BNB’s utility value and demand in the short term

- Greater activity seen in the markets with growing trade volumes

- Positive % increase of QoQ profits after 5 consecutive quarterly decline

- Diverging correlations between BNB with BTC/ETH enhances the attractiveness of the token

Notwithstanding the above, Picolo acknowledges several weaknesses such as the recent hack of Binance with increased price volatility. However, the team showed great composure in handling the situation. Furthermore, our model suggests that this event has minimal impact on the long-term value of the token albeit short-term deviations.

In light of the preceding, we recommend a ‘Buy’ rating given the favourable outlook on BNB.
About the Analyst
Lennard specializes in fundamental and technical analysis in digital asset investments. He became acquainted with blockchain, cryptocurrency and ICOs in 2016, and recently decided to take a meaningful step away from traditional banking to join this industry. Previously, Lennard spent 3 years with an investment bank in forex and debt capital markets. Prior to this, he also had entrepreneurship experience working with an e-commerce startup and a local social enterprise. Lennard graduated with a master's degree in Applied Finance and is fluent in English, Chinese with a basic in Korean. He is a CFA level III candidate.

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Monitor – Continue observation until clarity of information is provided
Sell/ Avoid – Investment is associated with high risk of losing capital
Hold/ Neutral – To maintain current levels of position until the next updated release
Spec Buy – A speculative opportunity for investors with higher risk tolerance
Buy – A high conviction buying opportunity

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