

# Piccolo Research

Independent research on blockchain startups and ICO's

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

11 September 2018 - Lennard Neo

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# BINANCE (BNB)

## Binance paves the way for further upside led by increasing market share and user adoption

### Summary

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 350 token pairs for trading.

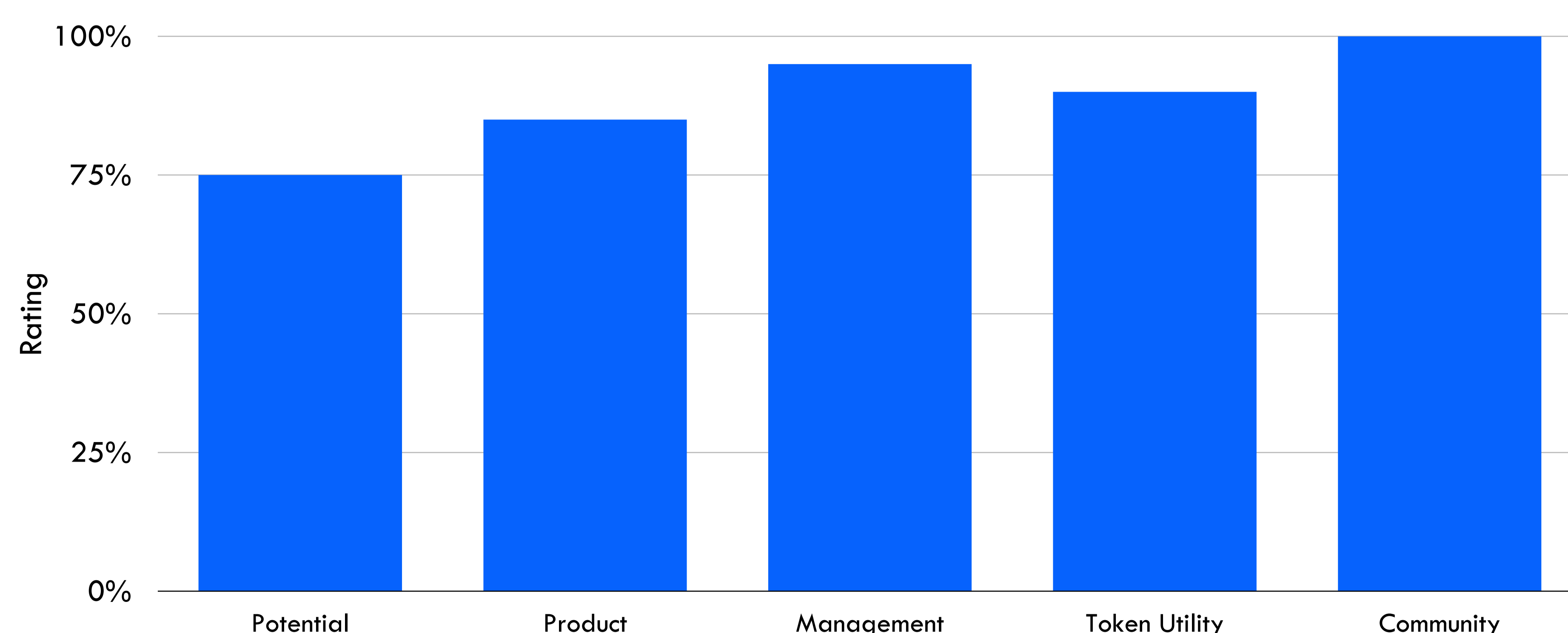


### Company overview

Binance was initially incorporated in China but has recently shifted their headquarters to Malta in favour of its crypto friendliness. 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 400+ employees with an influential CEO Zhao Changpeng at its helm.

Binance is primarily an altcoin focused exchange, differentiating itself from Coinbase, Bitmex and Bitforex. The platform averages \$1b trading volume per day, has over 9m userbase worldwide, and recently surpass Deutsche bank profits in Q1. The platform also announced a \$1b social impact fund to foster the growth of blockchain industry and is continually innovating together with its community.

### Birds-Eye View



Buy

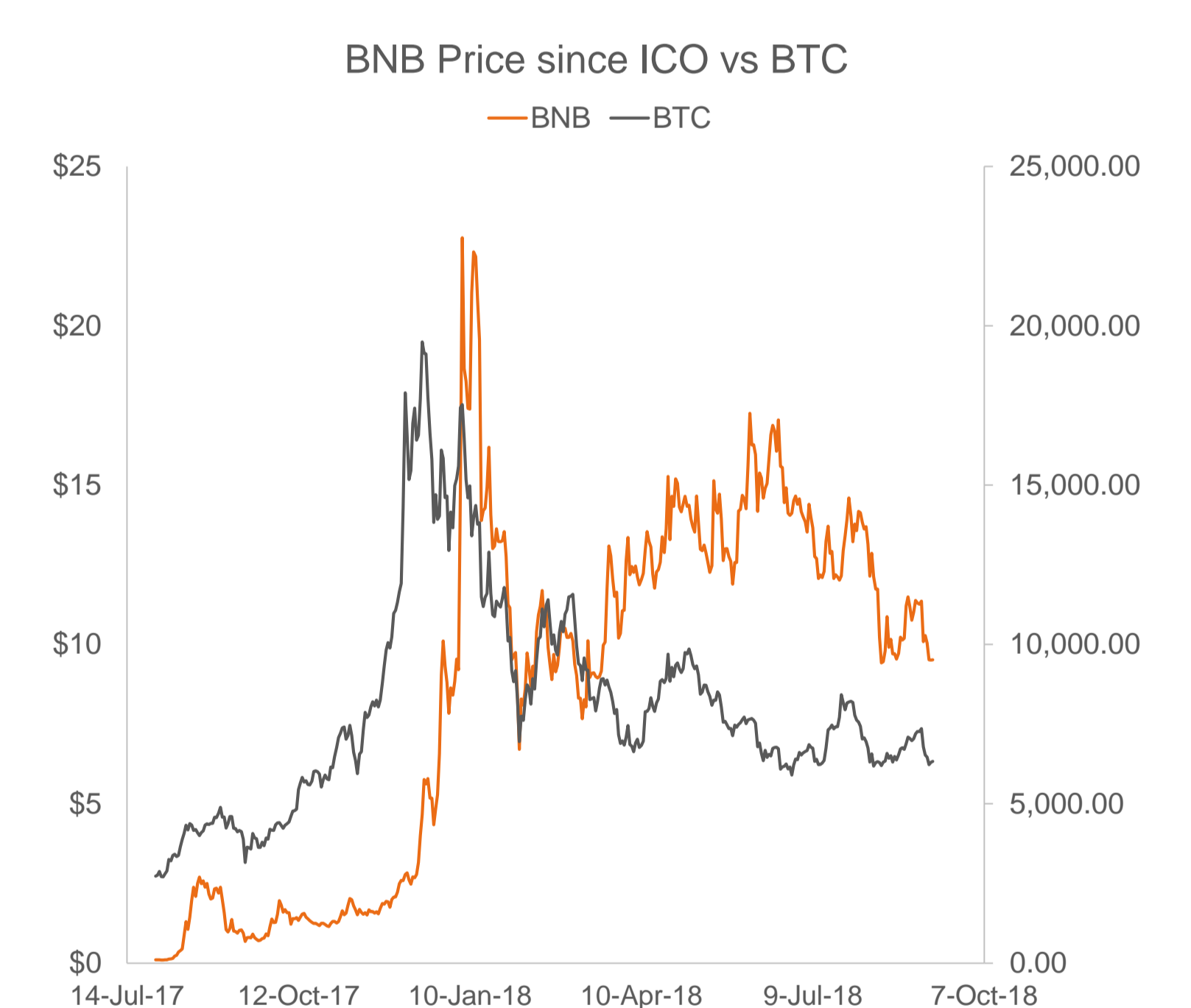
Target Price: **\$22.80**  
(139% upside)

### General

Ticker:	BNB
Price (10 Sep 2018)	\$9.52
YTD price range	\$6.71 - \$22.76
YTD Avg BNB Trading Volume	\$84.7m
Circulating Token Supply	95,512,523
Market Cap (10 Sep 2018)	\$915m

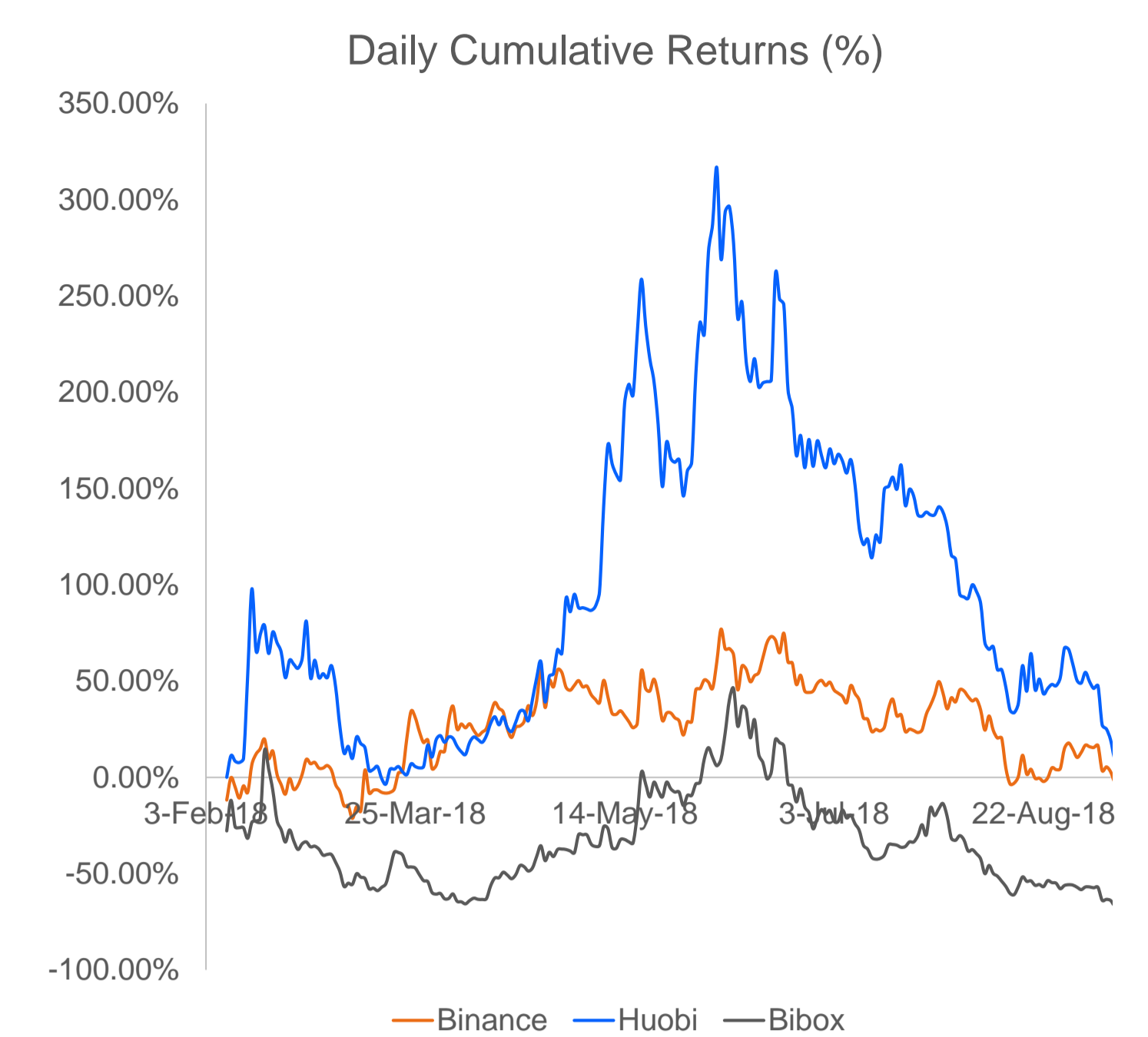
### Platform Info

Token Type	Utility
Sector	Exchange/ Finance
Regional Focus	Global
30d Exchange Volume	\$32.5b
CEO	Zhao Changpeng
Website:	<a href="#">Click Here</a>

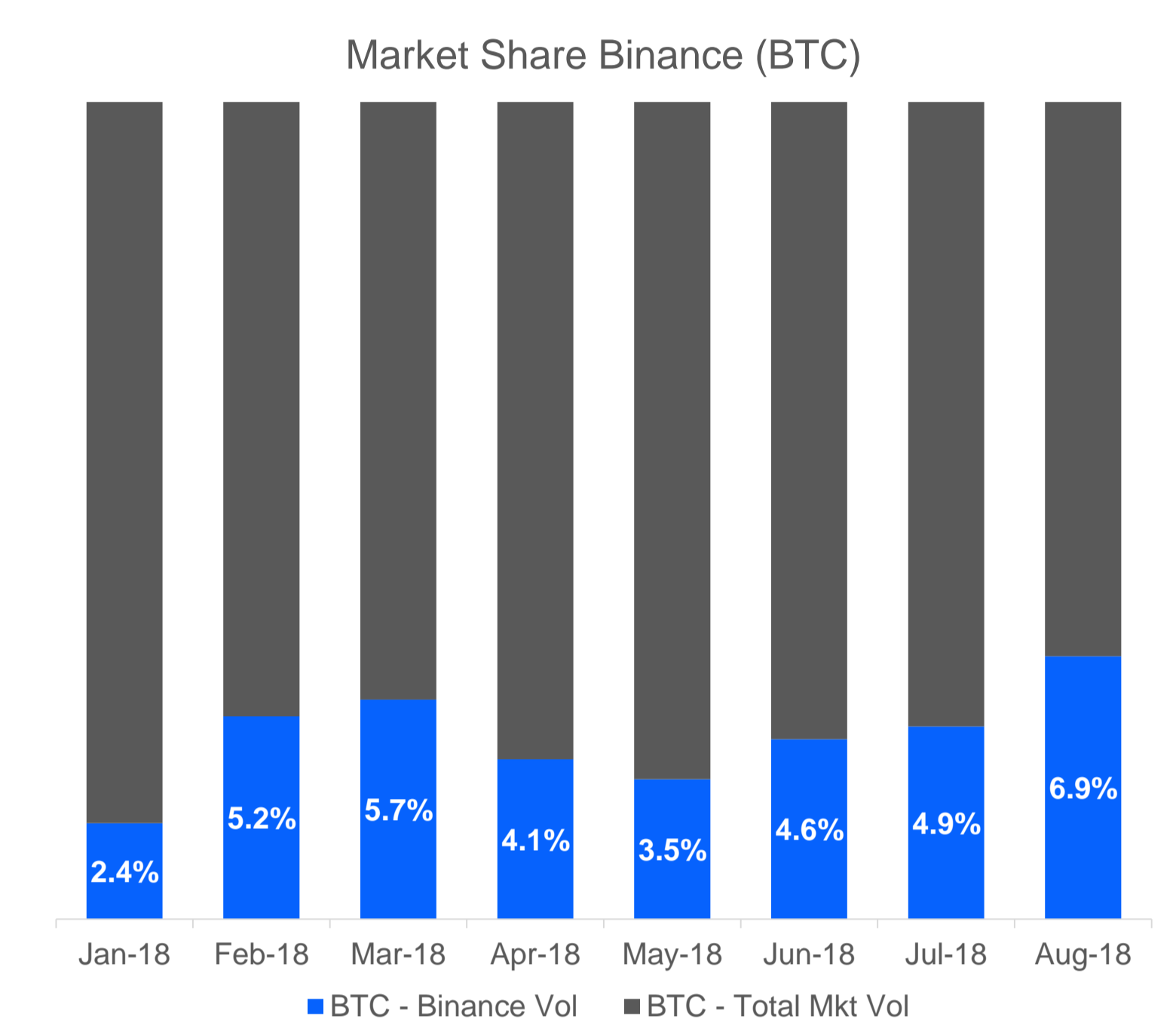


## Thematic Views

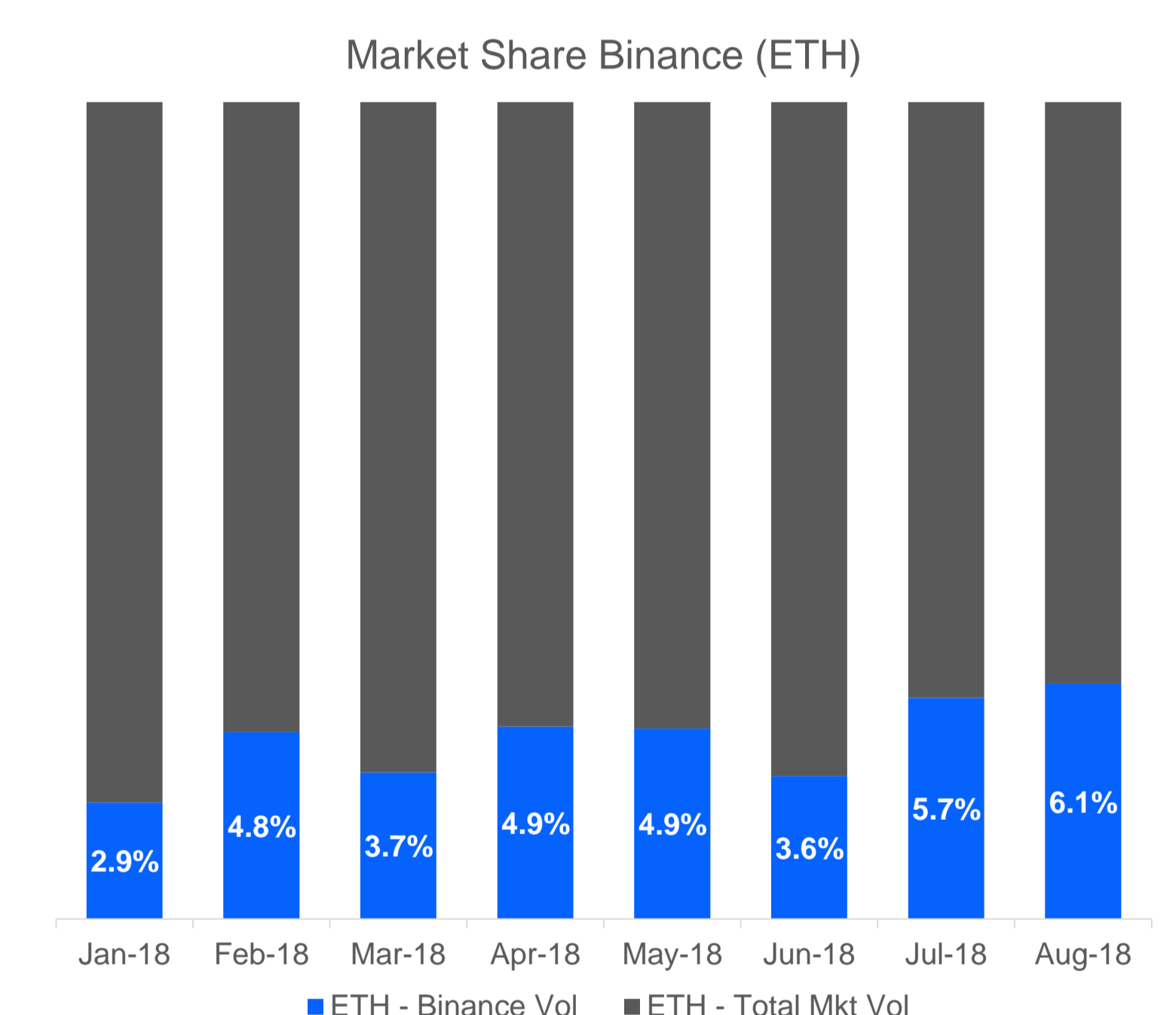
**Higher adoption through organic growth and reputation.** Binance has gained a significant foothold in the digital asset exchange sector since its inception. It has continuously retained the top 3 positions as an exchange with the most traded volume globally with an average of \$1b per day. The platform has developed itself as one of the major players in the crypto to crypto exchange sector and has built a strong brand name in both the demand and supply side, naming it as one of the most sought-after exchanges for listing. The exchange also dictates one of the best referral programs in the market (40% max commission), as compared to Huobi (30%), OKEx (Adhoc referral program), and Bibox (20%). Binance's reputation coupled with the steady organic growth of users could translate into sustainable long-term success.



**Binance gaining an increased market share of overall trading volume.** Even though total market cap and trading volume has dropped significantly (-70% YTD), Binance trading volume has been consistent around the \$1b mark. Its market share of trading volume for both BTC and ETH has increased from 2.4% to 6.9% and 2.9% to 6.1% respectively since Jan 2018. We see a continuation of this trend going forward as we expect Binance to capture 10-15% of the market's trading volume.



**Innovative drive to improve exchange features and product offerings.** Binance has consistently been at the forefront of providing better user experience of their services. In Aug 2018, the exchange revealed an MVP of its decentralised exchange (DEX) platform, which is a core component of their business strategy to provide a hybrid exchange ecosystem. In addition, the firm made its first acquisition in Trust Wallet to support its DEX platform. There are several other features that Binance had rolled out within the past year, which includes Binance Labs, Binance Info and Binance Academy.



## Competitor Analysis

There are many competitors in the exchange sector. We have identified two projects that portray significant similarities to Binance for its competitive landscape.

Project Name	Binance	Huobi	OKEx
<b>Infrastructure Type</b>	Crypto to Crypto Exchange	Crypto to Crypto Exchange	Crypto to Crypto Exchange
<b>Symbol</b>	BNB	HT	OKB
<b>Initiation Year</b>	Jul 2017	Jan 2014	Sep 2013
<b>Token Price</b>	\$9.52	\$1.67	\$1.34
<b>Market Cap (Based on Circulating Supply)</b>	\$915m	\$80m	\$805m
<b>Market Cap (Based on Total Supply)</b>	\$1.83b	\$835b	\$1.34b
<b>No. of tokens listed</b>	380	275	507
<b>Trading Fees</b>	Maker: 0.1% Taker: 0.1%	Maker: 0.2% Taker: 0.2%	Maker: 0.1% Taker: 0.15%
<b>Returns since listing (vs USD)</b>	8900%	16.8%	34.0%

Figures as of 10 Sep 2018, source: Coinmarketcap, Exchange Websites

## Valuation

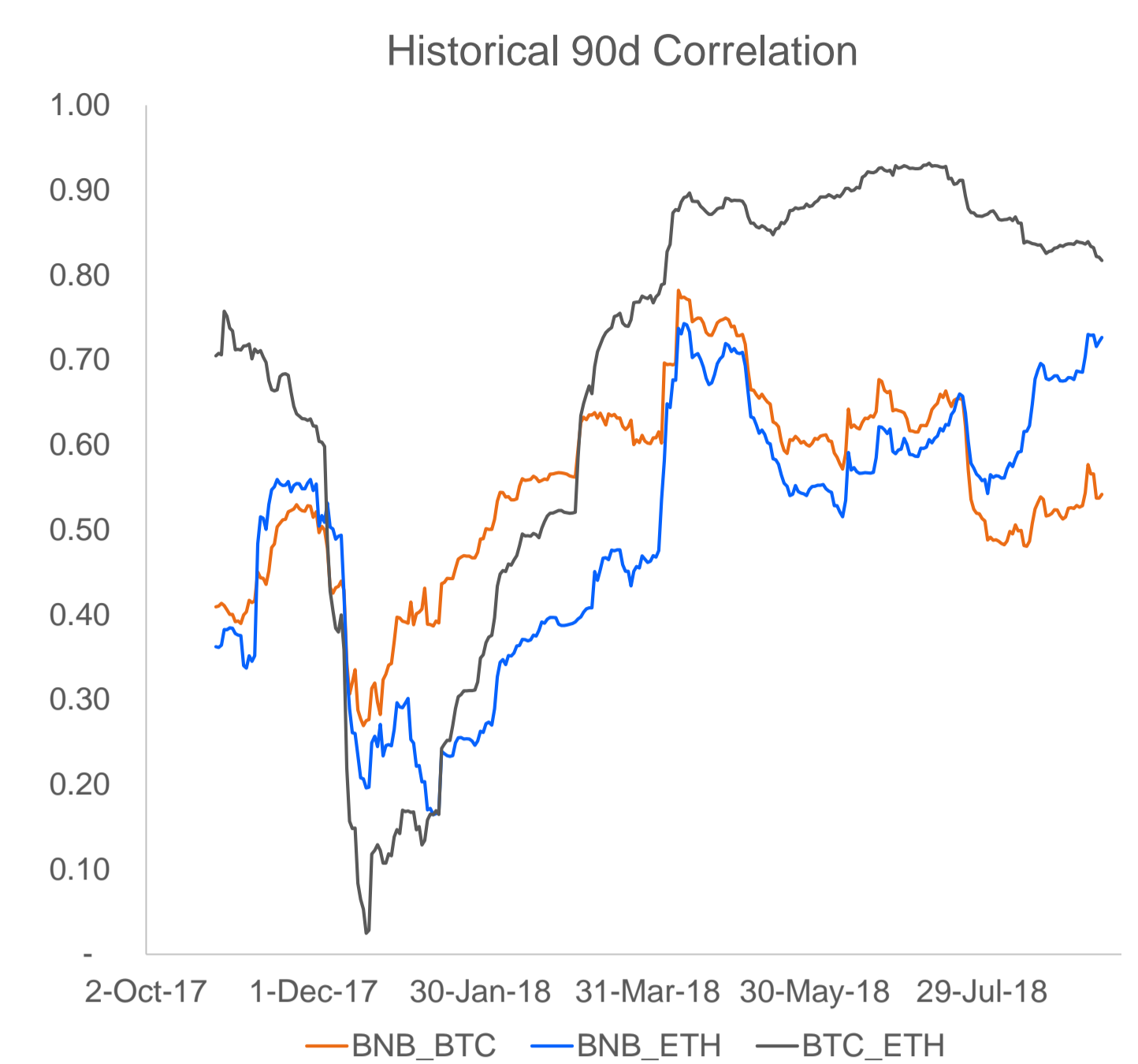
We adopt a two-prong approach to the valuation of BNB. First, fundamental value is derived on the basis of token discounts and token repurchases that will occur going forward. We forecast an implied quarterly growth rate of 27.8% in trading volumes and utilise Nasdaq as a competitor to calculate an implied profit margin based on its operational costs. We further assume a quarterly discount factor of 11.6% (55% annualised) typically used by VCs, indicating an intrinsic valuation of \$27.08.

Second, a relative valuation approach using a dataset of comparable exchanges was adopted to derive an average Market Value/Volume multiple (MV/Vol), estimating the token price at \$18.50.

An average of the two valuation approaches was taken to derive a value of **\$22.80** per BNB token.

## Key Risks

- The utility of BNB tokens are heavily skewed to decisions made by the management, as token holders do not hold any rights to these decisions
- Stiff competition between exchanges with some offering over 100% cashback of trading fees to penetrate the market
- Regulatory changes and uncertainties create headwinds



Parameters Inputs	Values	Comments
Initial Supply BNB	200m	
Avg 30d Volume*	28.7b	
% Profits to buyback BNB	20%	
Trading Fees	0.2%	
Growth in Volume Ann	166.5%	Total market cap growth rate since 2013
Growth in Volume QoQ	27.8%	
Discount Factor Ann	55.0%	VC typical discount rate between 40-70%
Discount Factor QoQ	11.6%	
Terminal Value growth Ann	3.0%	30y US treasury rate
Terminal Value growth QoQ	0.7%	
Profit Margin	77.9%	Implied Profit Margin derived from Nasdaq Q2 OER

\*As of 10 Sep 2018, adjusted

Fundamental Valuation	Actual				Forecast													
	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	TV	
(Figures in millions)																		
Trading Discount Schedule	50%	50%	50%	50%	25%	25%	25%	25%	12.5%	12.5%	12.5%	12.5%	6.5%	6.5%	6.5%	6.5%	0.0%	
Trading Volume				85,915	109,772	140,253	179,199	228,959	292,536	373,767	477,555	610,163	779,593	996,070	1,272,658	1,626,050		
Trading Fees (Revenue)					220	281	358	458	585	748	955	1,220	1,559	1,992	2,545	3,252		
Value of Discount					55	70	90	114	73	93	119	153	101	129	165	211		
Total Revenue to Binance (After Disc)					165	210	269	343	512	654	836	1,068	1,458	1,863	2,380	3,041		
<b>Value attributable to BNB repurchase</b>																		
Profits	7.5	200	150	150	128	164	209	268	399	510	651	832	1,136	1,451	1,854	2,369	22,023	
Profit to buy back BNB (20%)	2	40	30	30	26	33	42	54	80	102	130	166	227	290	371	474	4,405	
Discount Factor					0.8962	0.8032	0.7199	0.6452	0.5782	0.5182	0.4644	0.4162	0.3730	0.3343	0.2996	0.2685		
PV profits					23	26	30	35	46	53	60	69	85	97	111	127		
PV of TV					1,183													
Sum of PV of repurchases					1,946													
<b>Value attributable to discounts</b>																		
PV of Discounts					49	56	64	74	42	48	55	63	38	43	50	57	0	
Sum of PV					641													
Total PV (Buyback + Discounts)					2,587													
Total Supply BNB	199	197	195	192														
Circulating Supply BNB				95.51														
Burnt BNB	0.99	1.82	2.22	2.53														
Implied token price	\$1.52	\$21.96	\$13.51	\$11.86	\$27.08													

Exchanges	Symbol	Total Supply	Token price	Market Val (Total Supply)	Volume (1d)	MV/Vol multiple	Implied Token Price	Potential Upside
Binance	BNB	192,443,301	\$10.28	1,978,317,134	1,098,385,455	1.80	\$18.50	80%
Huobi	HT	500,000,000	\$1.79	895,000,000	709,487,589	1.26	\$4.60	157%
OKEx	OKB	1,000,000,000	\$1.65	1,650,900,000	919,866,880	1.79	\$2.98	81%
Bibox	BIX	267,941,449	\$0.43	114,681,352	191,117,162	0.60	\$2.31	440%
KuCoin	KCS	180,730,576	\$1.28	231,335,137	15,204,864	15.21	\$0.27	-79%
CoinEX	CET	9,962,146,451	\$0.03	318,041,525	321,471,165	0.99	\$0.10	228%
CobinHood	COB	1,000,000,000	\$0.03	26,036,000	3,625,233	7.18	\$0.01	-55%
LAToken	LAT	400,000,000	\$0.08	30,802,400	19,573,177	1.57	\$0.16	106%
Fcoin	FT	2,510,925,464	\$0.04	104,913,999	205,622,922	0.51	\$0.27	535%
Liquid (prev known as Quoinex)	QASH	1,000,000,000	\$0.22	220,238,000	147,909,064	1.49	\$0.48	118%
Bitfinex				Redeemed / 100% Buyback				

Source: Coinmarketcap, exchange websites (Figures as of 6 Sep 2018)

MV/Vol Avg 3.24

## Price Sensitivity Table

		WACC				
		9.6%	10.6%	11.6%	12.6%	13.6%
Growth Rate	21.8%	22.43	19.65	17.40	15.56	14.02
	24.8%	28.28	24.63	21.69	19.28	17.28
	27.8%	35.70	30.91	27.08	23.95	21.36
	30.8%	45.06	38.83	33.86	29.81	26.46
	33.8%	56.85	48.79	42.35	37.13	32.82

## Conclusion

In conclusion, Picolo Research presents a '**Buy**' rating on Binance with a target price of \$22.80, which represents a 139% upside potential. We believe that Binance will continue to reign the top few spots within the exchange segment as it continues to capture a greater market share of the entire trading volume. In addition, the positive outlook on altcoin trading volumes will provide a medium-term catalyst for our price target.

Overall, for the reasons listed below, Picolo affirms its rating:

- Greater adoption of userbase through organic growth will prove to be sustainable in the long-term
- Binance market share of overall trading volume has been increasing YTD steadily
- A plethora of opportunities that could be explored including corporate accounts, custodians, fiat to crypto services, which in turn could provide greater utility for token holders
- BNB offers decent risk diversification for heavily skewed BTC/ETH portfolio given its lower correlation among the major coins

Notwithstanding the above, Picolo acknowledges the short-term weakness in the current markets, but we are optimistic that trading volumes on Binance will not be heavily affected. Furthermore, our analysts have taken a conservative approach in our valuation model and could become cautious if there are significant changes made to the utility value of the token.

In light of the preceding, we recommend a '**Buy**' rating given our favourable outlook on Binance Token.

## 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.

## Ratings Definition

**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

## Disclaimer

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