

Solana Investment Memo Q4 2022

Introduction

Solana (SOL) is a smart contract platform that is comparable to Ethereum (ETH). This document outlines an investment thesis for exposure to Solana. To make this assertion, key strengths, risks, and relative valuation models are explored to develop a long-term bull case.

Tokenomics

Solana has a relatively low inflation rate. It started at 8% in 2020 and reduces by 15% every year until it reaches a fixed 1.5% in the year 2031.

One critique of Solana is its high venture capital (VC) ownership percentage. The top 100 wallets held over 30% of Solana's supply prior to FTX's bankruptcy filing. Since FTX held 10.87% of Solana's supply, it should reduce Solana's VC ownership closer to 20% as FTX is forced to liquidate.

Decentralization

Decentralization (measured by the Nakamoto Coefficient or the number of validators) is essential for censorship resistance. Solana has a Nakamoto Coefficient of 31, making it the 3rd most decentralized blockchain, after Bitcoin (7349) and Ethereum (34). It's higher than Avalanche (28) and Thorchain (27). Solana is secured by over 1,900 validators and 3,400 nodes. A crypto with 1,000+ validators is commonly believed to be "sufficiently" decentralized.

Throughput

Throughput is essential for minimizing network outages and unlocking new DeFi use cases. A high transaction per second (TPS) capacity is necessary to handle user demand without triggering a network outage. High TPS also unlocks new DeFi use cases, like a 24/7 stock exchange, which would require a TPS of ~1 million. Solana currently has a theoretical throughput of 65,000 TPS and could reach 710,000 TPS in the future. On September 14, 2021, its real-world throughput was as high as 300,000 to 400,000 TPS before a 16-hour network outage caused by spambots.

Conclusion

A low inflation rate, sufficient decentralization, and high throughput does not necessarily mean that Solana is a good investment at its current price. To determine if it's currently a good investment, we'll look at (1) its percentage of Ethereum's market cap (% ETH MC) and (2) its market capitalization divided by daily active addresses (MC/DAA) compared to ETH MC/DAA.

Results¹:

- SOL % ETH MC: 3.11% (lower is better)
- SOL MC/DAA: 11,133 (lower is better)
- ETH MC/DAA: 329,185 (lower is better)

The author believes that Solana is currently a buy at ~\$11.59 based on its value relative to Ethereum. That said, Solana is not perfect and has a few key risks².

¹ Data sources: CoinMarketCap, Nansen

² Key risks: (1) A coding bug, (2) government regulation, (3) network outages, (4) tarnished reputation from FTX scandal