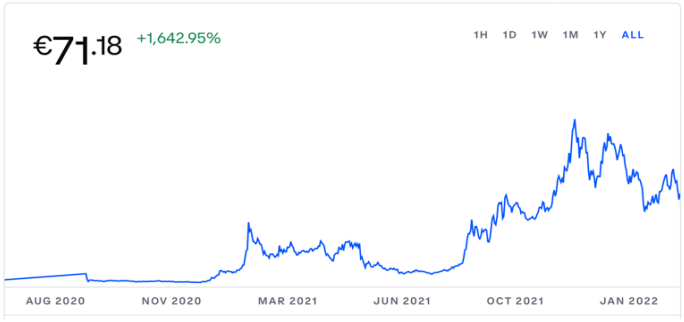
Ticker: AVAX

Cryptoasset Evaluation Thesis

Name:	Rhythm Gupta
Crypto asset:	Avalanche



Background and price history

What led to the project's creation?

The core aim of the Avalanche network is to be faster and cheaper than other layer-1 smart contract protocols. There was a strong need of crypto asset which would prioritise scalability and transaction processing speed.

What are the general functions of the project?

1.Avalanche is an open-source platform for launching decentralised applications and enterprise blockchain deployments in one, highly scalable ecosystem.
2.It is the first decentralized smart contracts platform built for the scale of global finance, with near-instant transaction finality.

How long has the project been in existence for?

Avalanche was launched in 2020 and has been in existence for two years now.

Who are the key individuals?

Emin Gün Sirer,a U.S. Cornell University (Ivy League) Professor, entrepreneur, and founder of Ava Labs launched Avalanche.

Is there anything unique you find about this project that stands out to you?

Unique features which make Avalanche stand out are:

1.Transaction fee structure: Transaction costs vary with each transaction and Avalanche users can vote to decide its transaction fee, making AVAX fees subject to change.

2.Coin creation rate: The maximum supply of AVAX is capped at 720 million tokens, but AVAX holders can control the rate of new coin creation by voting to adjust the amount of AVAX that is paid as a reward for adding a new block to the Avalanche blockchain.

Avalanche (AVAX) plummeted below the moving averages and the uptrend line on Feb. 20, suggesting that the higher levels continue to attract selling by the bears.

From the past years, we can see that the price has been continuously fluctuating but we can't see any major dip in the price or a significant reason for fluctuation. The general reasons for fluctuation can include supply and demand, government regulations, media hype and investor relations.

Regulatory and Legal outlook

Financial Action Task Force (FATF) "is the global money laundering and terrorist financing watchdog. The inter-governmental body sets international standards that aim to prevent these illegal activities and the harm they cause to society and co-ordinated global response to prevent organised crime, corruption and terrorism. As a policy-making body, the FATF works to generate the necessary political will to bring about national legislative and regulatory reforms in these areas."

AMLD 5(Anti-Money Laundering Directive 5)
"Represented a substantial improvement to prevent the EU financial system from being used for money laundering and for funding terrorist activities. It eliminates all the loopholes of AML4 directive that had been powering the financial crimes. AMLD5 brings the anti-money laundering and counter-terrorism efforts by the European Union in line with current FATF Standards."

MiCA "The European Commission's Regulation of Markets in Crypto-assets (MiCA) proposal is a regulatory framework developed since 2018 to help regulate currently out-of-scope crypto-assets and their service providers in the EU and provide a single licensing regime across all member states by 2024."

MiFID II "MiFID II is a legislative framework instituted by the European Union (EU) to regulate financial markets in the bloc and improve protections for investors. Its aim is to standardize practices across the EU and restore confidence in the industry, especially after the 2008 financial crisis."

Use Cases/Value Proposition/Functioning products

What is the selling point of the project?

The selling point of the project is that it is

1. Blazingly fast
2. Low cost
3. Eco-friendly
4. Compatible with dApps(decentralised applications)
5. Security guarantee above 51% standard (80% parameterized)

Why would someone use the proposed project over another?

1. The transaction finality can occur in less 2 seconds while it is much more for other crypto assets such as 60 mins for bitcoin, 6 mins for Ethereum and 60 seconds for Polkadot.
2. Must cheaper than other cryptoassets(lower fees).
3. Provides tough competition to other major cryptocurrencies in the market e.g. Ethereum.
4. More scalability, i.e. more transactions per second Avalanche can process over 4,500 transactions per second while Ethereum can support roughly 13 transactions per second.

Reliability

Has the protocol been hacked?

While, there hasn't been any direct hack on the project, avalanche based defi platform hacked twice but the company soon found the error and resolved it.

How safe are your funds when using the protocol?

Avalanche offers high security on funds. Avalanche uses PoS Protocol (proof of Stake), a smarter, faster, and more gas and energy-conscious decision, trying to make decentralization and scalability easy.

Do the fee's maintain a fixed rate?

The users of the project Avalanche have the right to vote to change the fee, hence the fee does maintain a fixed rate.
In my opinion, Avalanche is a very reliable source as it can scale without sacrificing decentralisation and security in terms of interoperability.
Ava Labs, which launched Avalanche recently entered into partnership with Deloitte, which will use the Avalanche blockchain to build more disaster-relief platform and improve its speed, accuracy, and resiliency.

Key risks and competition/Peer Comparison:

Metrics	Bitcoin	Ethereum	Polkadot	Avalanche
Launch Date	3/Jan/2009	30/July/15	26/May/20	21/Sept/20
Circulating Supply (In ml)	18.92	119.7	987.5	244.74
Maximum Supply (In ml)	21	18	10M+Inflation	720
TPS (transactions processing/sec)	7	14	1500	>4500
Block Time*	10 mins	14 seconds	6 seconds	No set block time, it doesn't need block production to secure chain
Transaction finality	60 mins	6 mins	60 seconds	<2 seconds

*Block time is the measure of the time it takes the miners or validators within a network to verify transactions within one block and produce a new block

AVAX, the Layer-1 blockchain, is constantly rising in value on the market, quickly establishing itself as a serious challenger to Ethereum. Avalanche employs the PoS Protocol (proof of Stake), which is a smarter, faster, and more gas and energy-conscious decision aimed at easing decentralisation and scalability by attempting to solve the Blockchain Trilemma – as opposed to Ethereum's existing PoW Protocol, which is antiquated and slower (ETH has suffered a 40 percent dip last year).

Fee structure / cost of use

C-Chain Fees

The Avalanche C-Chain uses an algorithm to determine the "base fee" for a transaction. The base fee increases when network utilization is above the target utilization and decreases when network utilization is below the target.

Base Fees

The base fee can go as low as 25 nAVAX (GWei) and has no upper bound.

Developer Activity/Talent Attraction/Team Involved:

- We want you to look at GitHub activity- https://github.com/ava-labs/avalanche-explorer
- Developers socials media's – Ava Labs (@avalabsofficial) / Twitter 44.45K million followers
- Project's website - https://www.avax.network
- Are applications being built on Ethereum?
- It is a proprietary proof-of-stake blockchain that is **Ethereum-compatible**. Developers can build and deploy decentralized applications (dApps) on the platform. Avalanche offers the advantage of being compatible with the Ethereum Virtual Machine (EVM). In other words, the Avalanche blockchain can host Ethereum-based apps

Level of centralisation vs decentralisation:

Community Governance enables all Algo holders to participate in the decision-making process on the growth and development of the Avalanche ecosystem.

- **Peer-to-peer transmission:** Any participant can transmit AVAX to another participant with a digital wallet without bureaucracy, banks, excessive fees or delays. AVAX can be transferred among an unlimited number of people, instantly and simultaneously.
- **Distributed database:** Avalanche is designed to provide unprecedented decentralization with a commitment to multiple client implementations without centralized control of any kind. The ecosystem is designed to avoid divisions between classes of users with different interests. Crucially, there is no distinction and preferences between miners, developers and users.
- **Record keeping:** The Avalanche network technically consists of three blockchains that record different types of transactions. Firstly, the exchange chain or X-chain which hosts the native token of Avalanche, AVAX as well as other digital assets. The second is called the Platform Chain or P-chain, which is the metadata blockchain on Avalanche and coordinates validators, keeps track of active subnets, and enables the creation of new subnets. The P-Chain implements the Snowman consensus protocol. The third and final blockchain is the Contract Chain or C-Chain, which allows for the creation of smart contracts using the C-Chain's API.

Open/closed source (Transparency):

Transparency: Avalanche is open-source and the code can be seen and edited by anyone. The network is interoperable, which allows developers to build new permissionless or permissioned interoperable blockchains seamlessly. Network participants can easily create and trade digital smart assets.

Network effects/Adoption strategy:

Avalanche stands top in terms of metrics but what lacks is its marketing aspect as cryptocurrencies which are popular stand son top. Thus, marketing in cryptocurrency is essential too.

Community & Developer Endowment: Groups that are developing core tooling and infrastructure on Avalanche as well as supporting Avalanche through grassroots community building and marketing. For example, these may include Avalanche Hub (previously AVA Hub), Avalanche Ambassadors (previously AVA Ambassadors), Avalanche-X (previously AVA-X) grantees, and more.

Consensus Mechanism

A consensus mechanism is a fault tolerant way that blockchain systems agree on the state of the network among all the distributed nodes which guarantees synchronisation. To ensure that all transactions on the network are genuine and all participants agree on a consensus on the status of the ledger which automates the process and provides security to the network.

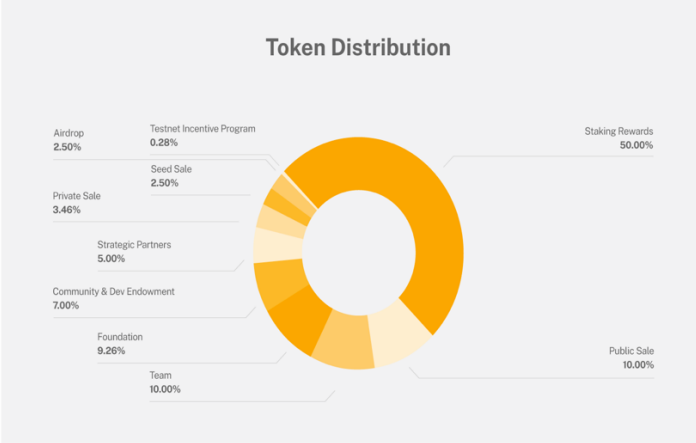
The Avalanche Consensus Protocol is a family of four mechanisms — Slush, Snowflake, Snowball, and Avalanche, these build upon each other and become more secure in the process. In short, the Avalanche Consensus Protocol is a unique voting protocol that relies on "repeated random subsampling". In this process, validator nodes randomly query other validators until the network reaches a consensus and decides whether to accept or reject an incoming transaction.

Tokenomics

Tokenomics covers the economics and game theory behind a project's token. It covers all aspects from the coin's creation, distribution, supply, management and even removal from the network.

- **Seed Sale:** This sale was completed in February of 2019, where a total of 18M tokens were sold. Tokens were sold at a price of approximately $0.33 per token. The implied fully-diluted main net valuation of this sale was $120M. These tokens were sold to help initiate the development of the Avalanche codebase.
- **Private Sale:** This sale was completed in May of 2020, where a total of around 24.9M tokens were sold. Tokens were sold at a price of $0.50 per token. The implied fully-diluted main net valuation of this sale was $180M. These tokens were sold to distribute AVAX and build staking infrastructure.
- **Public Sale:** Option A1, Public Sale Option A2, and Public Sale Option B. These tokens are allocated

- for the current public sale, where at most 17M tokens will be sold. Since Public Sale Option A1 and Public Sale Option B take from the same pool of 12M tokens, public purchasers will decide the final percentages of each allocation. On other hand, in order to allow for a fair and equitable distribution of tokens, Public Sale Option A2 will have its own dedicated pool of 60M tokens. Public Sale Option A1 and Public Sale Option A2 tokens will be sold at a price of $0.50 per token, and Public Sale Option B will be sold at a price of $0.85 per token.



Scalability

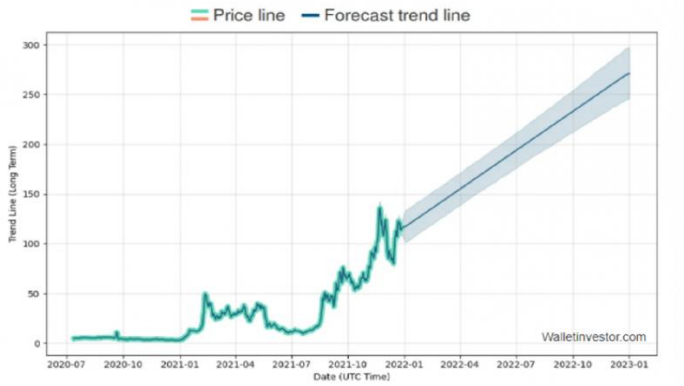
Blockchain scalability is the expansion of a network in digital space in terms of transaction processing speeds and processing power to accommodate the addition of new applications and the increase in user operations.

Avalanche boasts high scalability. Avalanche employs the PoS Protocol (proof of Stake), which is a smarter, faster, and more gas and energy-conscious decision aimed at easing decentralisation and scalability by attempting to solve the Blockchain Trilemma

Personal Outlook

Undoubtedly, Avalanche has great potential and would tend to be the most attractive cryptocurrencies, mainly for its native token, AVAX, that ensures high transaction security coupled with speed scaling a trillion per second.

Owing to the transaction speed, AVAX is a special attraction for buyers of financial assets worldwide.



2022: Avalanche is all set to affirm its strong position as a major attraction among its investor community. With investor confidence booming as per technical analysis, the AVAX price could cross all barriers scaling an average of $134.
2023: AVALANCHE has established a fast, reliable network and works with the user experience of the product. These factors can help the AVAX coin gain a much higher price of $190 per coin
2024: In accordance with AVAX price prediction, there are assumptions that the AVAX price may reach $220. The favor is done by majorly security and scalability features and Avalanche wallet.
2025:Considering they keep up the momentum, garnering a significant market cap, volume, and industry focusing on education, outreach, and innovations may take them to a future price level of $230
2026: If all markets turn favourable, the Avalanche price is set to break all barriers and perform exuberantly, scaling the peak as aforesaid. The AVAX price prediction for the Avalanche cryptocurrency suggests the minimum price to expect is $250.