



CRYPTOCURRENCY OUTLOOK :

ETH

Recommendation - BUY

PREPARED BY

Bing Enn Lim

Niranjan Kumar

Nelly Marsya

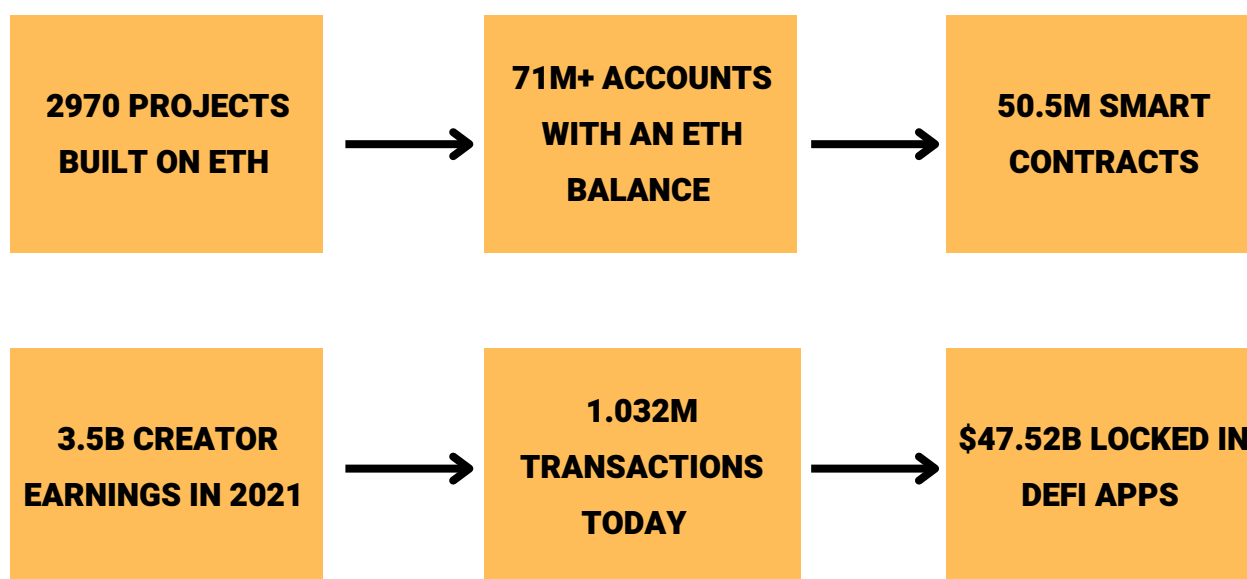
ETHEREUM USD -(ETH-USD)

Previous close	1288.12	Circulating Supply	122.37M
52 Week Range	896.11 - 3573.96	Market Cap	160.375B
Day's Range	1286.93 - 1310.68	Volume	5,017,736,704

Recommendation: Buy
Current price

MAKE OR BREAK YEAR ?

The current macroeconomic climate has curbed the growth of Ethereum and other cryptocurrencies, providing a gloomy outlook for 2023. However, a differentiating factor that sets Ethereum apart is its network that provides a platform for the innovation of new tools, apps and NFTs. It has become popular across the tech world, especially for gaming, music, entertainment and decentralized finance. Ethereum's limitless possibilities lays the foundation for the digital future.



OPERATIONS

Ethereum's blockchain allows the use of technology to build apps, hold assets, conduct transactions and communicate with others without being controlled by a central authority. Clients have the ability to control their own data and the extent to what is being shared. Comparable to Bitcoin's innovative spectrum on the blockchain, Ethereum shares many similarities yet marginal contrast. Both systems allow you to use digital money despite not paying through third party payment providers or intermediaries and yet Ethereum is programmable and allows you the ability to build and deploy decentralized applications on the network.

Some unique operations that can be done on the Ethereum blockchain includes:

- 1.Utilizing smart contracts to provide decentralized financial services, such as lending, borrowing and trading of assets through Decentralized finance (DeFi).
2. Creating and trading unique digital assets, such as artwork, collectibles, and virtual real estate, using Non-fungible tokens (NFTs)
3. Connecting and interacting with other blockchain networks through Interoperability technologies such as Plasma, Cosmos, Polkadot and more.

Banking for everyone	A more private internet	A peer-to-peer network
Not everyone has access to financial services. But all you need to access Ethereum and its lending, borrowing and savings products is an internet connection.	You don't need to provide all your personal details to use an Ethereum app. Ethereum is building an economy based on value, not surveillance.	Ethereum allows you to move money, or make agreements, directly with someone else. You don't need to go through intermediary companies.
Censorship-resistant	Commerce guarantees	All products are composable
No government or company has control over Ethereum. This decentralization makes it nearly impossible for anyone to stop you from receiving payments or using services on Ethereum.	Customers have a secure, built-in guarantee that funds will only change hands if you provide what was agreed. Likewise, developers can have certainty that the rules won't change on them.	Since all apps are built on the same blockchain with a shared global state, they can build off each other (like legos). This allows for better products and experiences being built all the time.

– The Merge –

The Merge also set the stage for further scalability upgrades not possible under proof-of-work, bringing Ethereum one step closer to achieving the full scale, security and sustainability outlined in its Ethereum vision. Ethereum needs to be able to handle more transactions per second without increasing the size of the nodes in the network as Nodes are vital network participants who store and run the blockchain. Increasing node size isn't practical because only those with powerful and expensive computers could do it.

To scale, Ethereum needs more transactions per second, coupled with more nodes because more nodes means more security.

– Beacon Chain –

In terms of improving scalability, Ethereum has certainly participated and completed a few notable projects to upgrade the system. Some of the main issues they tackle is the clogged network and lack of disk space.

– Security –

The planned upgrades improve Ethereum's security against coordinated attacks. Upgrades that protect validators against denial-of-service attacks, enhance their anonymity, and separate block building and block propagation are implemented soon. These upgrades protect individual validators and the network as a whole against liveness attacks and censorship.

– Bellatrix –

The Bellatrix upgrade was scheduled in early September 2022 for the upgrade for the Beacon Chain as a preparation towards The Merge. It brings forth penalties to their full values for any inactivity and slashable offense detected. This upgrade also includes updates to the fork choice rules in order to prepare for The Merge alongside the transition from the last proof-of-work block to the first proof-of-stake block. This update also includes providing awareness of the total term difficulty to various consensus clients.

FUNDAMENTAL ANALYSIS

1.MARKET CAPITALIZATION

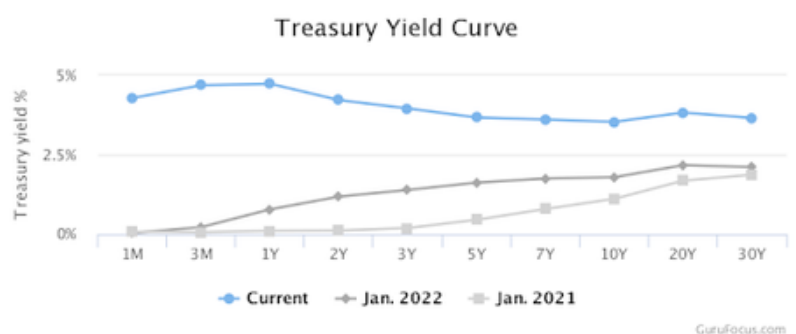


(Figure 2.1)

Ethereum is the second largest crypto by market cap, reaching the highest at its peak of \$571.67 billion on November 9, 2021. (Figure 2.1) Currently the market cap is at \$193.15Bn. With a market cap just under \$200Bn, Ethereum is observed as one of the most stable and proven investments in the crypto markets.

2.MARKET OUTLOOK GOING INTO 2023

November 2021 was when cryptocurrencies and other risky assets peaked. Just the expectations of higher interest rates alone had an impact on a forward-looking market and it has been mostly downhill for riskier investments. From the beginning of 2022 Ethereum has pulled back and interest rates alone have moved higher in an attempt to curb inflation.



(Figure 2.2)

As a result, further hikes will likely have a negative impact going into 2023 and investors will have to be wary of this volatility.



(Figure 2.3)

Another indicator of a potential recession is the M2 money supply of the U.S dollar that turned negative in November 2022 for the first time in 28 years. It is usually preceded by slowing rates of money supply growth. A report by Mises Institute analyst Ryan McMaken stated that this indicator is generally a “red flag” for economic growth and employment.

With a recession looming and expectations of higher rates ahead, we can expect the current bear market to extend even longer.

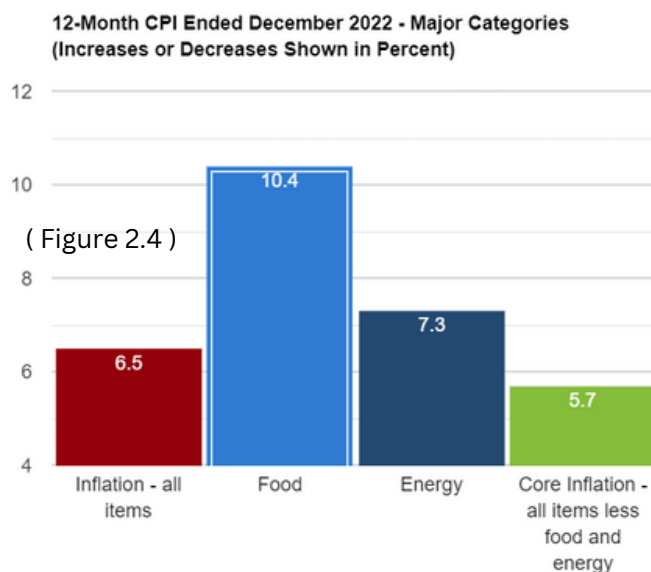
Minneapolis Federal Reserve president Neel Kashkari wrote in a blog post that he expects the terminal rates to go up by 5.4% by June 2023 - Current rates are in the 4.25-4.50% range.

According to the current yield spread, the yield curve is currently inverted - with short term rates well above long term rates. Historically, this has been a reliable indicator of an economic recession. The inverted yield curve (Figure 2.2) can be observed when the yield spread is less than zero. (Figure 2.3)

CONSUMER PRICE INDEX

CPI is the most closely watched inflation gauge as it takes into account changes in everything from the price of fuel to food and the cost of used vehicles.

Consumer prices for December fell 0.1% in line with the Dow Jones estimate however headline CPI rose 6.5% year over year, showing the persistence of the rising cost of living. Core CPI (excluding food and energy prices) rose 0.3% and was up 5.7% year over year, keeping in line with expectations. (Figure 2.4)



(Figure 2.4)

(Figure 2.4)



The energy index showed a 4.5 % decline due to a drop in gas prices. However investors will have to be cautious as the drop in gas prices may not be sustainable due to various factors such as the continued war between Russia - Ukraine and consumer demand. Food prices, Shelter, Medical care services, apparel prices and transportation have increased for the month and year over year while used vehicles and airline fares reduced over the month. Recent key figures show that inflation is quickly moderating and in line with expectations even though it is still high. (Figure 2.4)Current key figures have shown that there is an increased probability the Fed would approve of a 0.25% point increase on February 1 2023.

3.GLOBAL ADOPTION AND UTILITY

ADOPTION

With its rapidly growing ecosystem Ethereum's network supports Decentralized autonomous applications (DAOs), decentralized finance (DeFi), Non-fungible tokens (NFTs) and the Metaverse, powering thousands of real-world applications. Adoption is increasing due to its broad capabilities. Ethereum has an all-time high of 3.9 million active wallets and 10 million users. 24.4% of crypto owners hold ETH tokens globally and has the second largest market cap of approximately \$193 billion behind Bitcoin.

During the bull-rally in 2022, Ethereum's market dominance rose to 22% before declining to 19% due to increased competition. It has a faster adoption and growth rate than Bitcoin largely attributed to the ICO boom. Ethereum's search dominance came in second behind Bitcoin again in 2021, reflecting its popularity in the US, Canada, Saudi Arabia, Brazil, Russia, Argentina and South Africa.

While crypto assets remain volatile, the interest in Decentralised finance(DeFi) grew rapidly in 2021. Thus Ethereum saw corresponding growth since it is the one of the main blockchains that supports DeFi. Figures show over 4.4 million DeFi users compared to over 100,000 users since 2020. Considering that DeFi has not gone mainstream, it is almost certain that once Ethereum improves its efficiency and reduction in gas fees, there will be a larger growth of ETH transactions and adoption.

Global crypto Adoption Index measures where the most people are putting the biggest share of their money into cryptocurrency. This index also reflects the countries where individual, non-professional investors are embracing digital assets the most. 146 countries were ranked based on the usage of different types of cryptocurrency services. Data shows that global adoption levels have slowed due to the bear market conditions but remain well over pre-bull market levels in 2019.



(Figure 2.5)

UTILITY

There are eclectic sectors where Ethereum provides utility and creates value. In the music industry Ethereum is used for managing royalties by distributing tokens to facilitate fast and seamless royalty payments. In the remittance industry companies such as Everest, Abra and BloomX have avoided the use of intermediary banks to facilitate cross border payments through the use of P2P protocol like Ethereum . It is faster, direct and cuts out fees charged by intermediary banks making it inexpensive.

The Enterprise Ethereum Alliance, consisting of more than 200 organizations including Samsung Group, J.P. Morgan, Mastercard and Microsoft use customized software and networks that are based on Ethereum and they continue to experiment on private versions of Ethereum for enterprise purposes. Over 300 banks including J.P Morgan are using a version of the Enterprise Ethereum for running inter-bank payment networks.

Ethereum can also be used to transform the healthcare sector. It is possible for hospitals around the world to store, access and share the records of patients with the use of Ethereum. With the ease of record storing and sharing, it will be easier for doctors to have updated information about your health and all your doctors can have access to medical information even when you switch between locations.

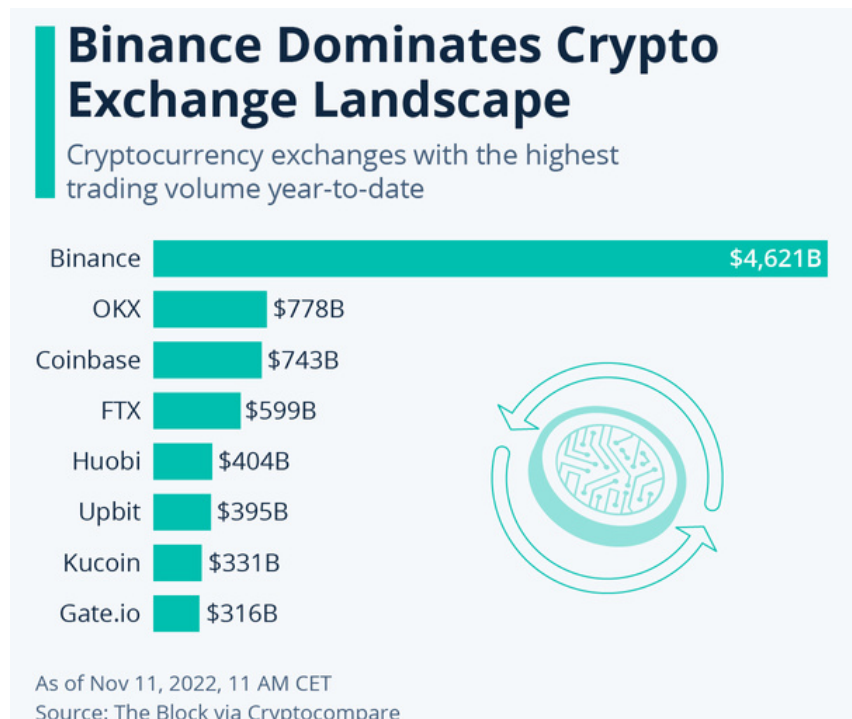
The creation of unique tokens that represent various assets such as collectibles, digital art, virtual real estate and games are done through the Ethereum network. Land, buildings and avatars in the blockchain network can also be bought and sold for millions of dollars. The NBA, Ubisoft and LVMH (Moët Hennessy Louis Vuitton) along with other organizations are experimenting with NFTs.

Results show that emerging markets dominate the GCAI. Users in lower middle and upper middle income countries often rely on cryptocurrency to send remittances and preserve their savings during times of fiat currency volatility. These countries dominate the adoption index mainly because of the unique and tangible benefits it offers to people living in unstable economic conditions. The popularity of Ethereum is on the rise and it is evident in its market value.

4. COLLAPSE OF CRYPTOCURRENCY EXCHANGES.

The epic collapse of FTX, the fourth largest cryptocurrency exchange, has raised questions about the broader crypto industry and a potential contagion that may extend to the financial markets.

Holders of crypto have taken huge losses - more than \$2 trillion in market cap have disappeared. The collapse of crypto exchanges and the list of entities that filed for bankruptcy soon after has shown how interconnected many of these firms are.



(Figure 2.5)

The crypto exchange market is highly competitive, with new platforms constantly emerging. Some new exchanges may attempt to imitate FTX's successful elements in order to gain a share of the market. It is uncertain if other crypto exchanges will follow FTX's footsteps, but it is a possibility.

5. GOVERNMENT REGULATIONS.

Regulations from congress and the SEC. Although regulations would bring stability to a highly volatile cryptocurrency market, many investors believe it would hinder its innovation and goes against the very spirit of cryptocurrencies which is decentralization.

There have been increasing signs that the U.S Securities exchange commission (SEC) will look to classify Ethereum and other “proof-of-stake” currencies as a security instead of a commodity- leading to changes in the network used and how ETH will be taxed and traded. This uncertainty will lead to market volatility.

We can observe both bull and bear scenarios. In a bearish scenario, the SEC would go after Ethereum the same way it has gone after other institutions in the crypto industry-like BlockFi, Coinbase (COIN -1.57%) and especially crypto XRP (XRP 0.77%). In the case of XRP, its legal battle can last for years, making it an unpleasant investment.

In a bullish case, more regulation would legitimize crypto eliminating many of the hacks and swindlers. The European Union has almost finalized its comprehensive regulatory framework known as the EU Market in Crypto - Assets Regulation (MiCA) set to take effect in 2024. After the collapse of FTX, Member of European Parliament Stefan Berger stated that governments should not overregulate excessively now but follow MiCA as it is meant to anticipate and prevent cases like FTX.

This provides a positive outlook for the crypto markets ensuring a fair market with less risk. If done right, regulations can restore trust in the markets.

RISKS

1.High transaction costs

Also known as gas fees, depends directly on the complexity of the transaction, the demand for making the transaction and the current price of Ether. However, regardless of high demand, the network can only process a dozen transactions per second. Resulting in periods of frustratingly high prices and keeping builders and users from completing the transactions that are important.

Mitigation: There are several steps users can take to minimise their transaction costs; Setting a lower base fee in your wallet, Wait for periods of Low activity, Use Layer-2 solutions or using gas fee tracking tools like Blocknative Gas Estimator. While Ethereum’s transaction fees tend to be higher than its competitors, it remains Web3’s top smart contract platform, providing rich programming capabilities and a larger growing developer platform.

2. Scalability

As transaction volume surged through the ICO Boom and DeFi summer there is still the issue of the network's speed. Regardless of high demand, the network can only process a range of 15 to 30 transactions per second. As transaction volumes surge, slow processing figures will lead to network congestion resulting in high gas fees and delayed transaction finality.

Mitigation: Sharding upgrades will spread the data storage requirements across the entire network, no longer requiring every node to hold 100% of the data. Although this doesn't directly address scaling the execution of transactions, this problem is being addressed directly by layer 2 rollup solutions. Sharding will give Ethereum room to breathe by maximizing the efficiency on rollups, enabling exponential improvements beyond the current 15-45 transactions per second limit. It is planned to ship sometime in 2023.

3. Privacy

Privacy has been identified as Ethereum's most significant problem. With recent upgrades to Ethereum, the topic of privacy has become more important than ever. Back in 2020, researchers have demonstrated that the Ethereum-account based model lacked financial privacy as they are vulnerable to surveillance from third parties such as analytics platforms and hackers. Enterprises that handle large business data will be prone to having competitors getting their hands on sensitive information that could jeopardize businesses growth. Users may provide personal information for taking out loans, sensitive private healthcare data for availing insurance, all of which are accessible on-chain. While transparency is a good thing, it can be a potential hazard for institutional traders and DeFi traders. The recent proof of stake merge does not effectively address the platform's privacy issue.

Mitigation: Constant upgrades have been implemented to improve privacy. The most recent announcement by co-founder Vitalik Buterin is the "stealth address". It conceals the sender's public key to prevent payment tracing and enables the transfer of assets without the need for prior communication. Stealth addressing allows recipients to confirm receipt of transfer without engaging with the blockchain. This process can be implemented quickly and contribute to practical user privacy at present.

4. Ethereum Killers

Two Cryptocurrencies that look to challenge Ethereum's dominance are Solana and Avalanche. Solana is making fast progress in the NFT marketplace where now it only ranks behind Ethereum in sales-volume activity. Avalanche has been reporting strong transaction activity for months and showing signs that it is starting to progress rapidly in the area of decentralized finance. (DeFi) Both cryptocurrencies have strategic plans initiated for 2023 that not only seeks to improve speed and efficiency but also investors confidence.

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Ethereum, like many cryptocurrencies, are volatile and highly speculative. But behind this volatility there is an increasing adoption of blockchain technology and digital currency.

TECHNICAL ANALYSIS



(Figure 3.1)
Ethereum
(ETHUSD) 1D

Source : <https://www.tradingview.com/chart/ETHUSD/OdG9jWKC-ETH-USD-1D/>

We will be taking a long position on ETHUSD.

Looking at the 1D time frame for ETHUSD we can see that price broke out of the \$1340 resistance level with high volume forming a bullish cup and handle pattern.

Using MACD, the MACD line crosses above the signal line during the initial breakout and diverges further from the longer EMA, signaling increased upside momentum. MACD is set with 12-period EMA and 26-period EMA with a value far above the zero line showing strong bullish momentum.



Source : <https://www.tradingview.com/chart/ETHUSD/fk1vdZ9B-ETHUSD-4H/> (Figure 3.2)
Ethereum (ETHUSD) 4H

Next, with the 4H timeframe for ETHUSD, we can use the 0.382 Fib level of Fibonacci retracement for an entry price of \$1500 and take profit level will be at next price resistance of \$1780 representing 18.3% upside and we have placed our stop loss at \$1425 which invalidates the breakout.

This trade gives us a risk and reward ratio of 3.78.

SENTIMENT ANALYSIS

1. TOTAL CRYPTO MARKET CAPITALIZATION



(Figure 3.3)

The total crypto market cap has seen a 73% drawdown from its highs of 3T and now sits at 800B, due to bearish macro economic factors such as rising fed fund rates and crypto contagion.

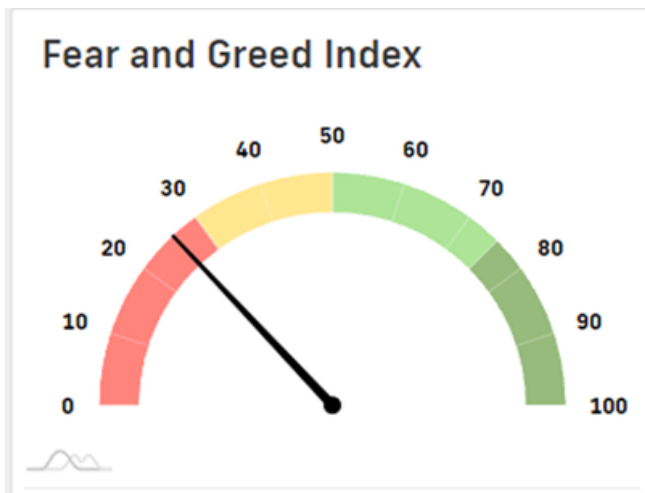
This represents a great buying opportunity as valuations of coins such as ETH are brought down and when the gap between inflation and the federal funds rate narrows, markets can begin to anticipate a move away from monetary tightening, signaling bullish momentum.

Source : <https://www.tradingview.com/chart/TOTAL/7JFroGnD-total-cap/>

2. ETH MARKET DOMINANCE

ETH market dominance has been in an uptrend since its lows in Dec 2019 of 7% and now sits comfortably at above 20% of total crypto market share.

ETH has seen more adoption due to POS(proof of stake) merge along with sharding technology, and will continue to set the pace for the entire crypto space moving forward.



(Figure 3.5)



Source : <https://www.tradingview.com/chart/ETH.D/IBHfDwei-ETH-D/>

(Figure 3.4)

COMPARABLE ANALYSIS

We used TVL(Total Value Locked) in decentralized finance and on chain activity to see how Ethereum has performed against its peers. These peers are selected based on market dominance and have similar functionality to Ethereum smart contracts, Binance smart chain(BNB) is the closest peer based on market capitalization.

Coin Name	Market Cap(US\$mil)	Circulating Supply	DEFI TVL(US\$B)	On Chain Volume(US\$M)
Ethereum	\$196,671,441	122,373,866	28.57	2190
Binance Smart Chain	\$48,243,610	157,902,682	4.82	220.8
Solana	\$9,040,019	371,340,662	0.28	65.68
Avalanche	\$5,651,588	314,592,155	0.9	49.54
Fantom	\$1,300,328	2,773,382,752	0.52	36.99

(Figure 4.1)

From Fig. 4.1 we can see that through Ethereum's unique selling point which is the creation of smart contracts in order to facilitate applications such as decentralized finance, NFTs, decentralized exchanges(eg. dYdX exchange) etc.

Ethereum's on chain volume of \$2.1B is highly significant, this shows us that it is still a leader for layer 2 solutions

CONCLUSION

While the crypto market may continue to be volatile, the long-term outlook for cryptocurrency remains positive as more people are starting to see the potential benefits of decentralized digital currencies.

The key factors to consider include the overall adoption and usage of the Ethereum network, the progress of the Ethereum 2.0 upgrade, competition, the overall sentiment in the crypto market and the global economic conditions.

It is important to note that crypto markets are highly volatile and prices are speculative. Current macroeconomic conditions may continue to have a negative impact on the crypto markets. The underlying technology for Ethereum has tremendous potential and it will continue to grow in the long term.

CITATION

(All Cryptocurrencies | CoinMarketCap, n.d.; Current US Yield Curve Today (Yield Curve Charts)| GuruFocus, n.d.; Enterprise on Ethereum Mainnet, n.d.; Ethereum in 2023: Here's What to Look Forward To, n.d.; Ethereum Whitepaper, n.d.; Hong Kong Stresses Pro-Crypto Stance as Industry Reels, 2023; Macroeconomic Data Points toward Intensifying Pain for Crypto Investors in 2023, 2023; One Way to Look at Crypto from a Macro Investor Perspective, n.d.; Private Ethereum for Enterprise, n.d.; What Is Ethereum? | Ethereum.Org, n.d.; What Will Crypto Bring in 2023?, 2022; Basulto, 2022; Castillo, n.d.; Team, 2022)

