



Cryptocurrency market analytics

[Power bi dashboard link](#)

[Dataset link](#)



What is Cryptocurrency market?

- Cryptocurrency is digital money that works online and is usually decentralized, meaning it's not controlled by any government. **Bitcoin**, launched in **2008**, was the first and is still the most popular cryptocurrency. Over time, other cryptocurrencies like Ethereum have emerged as digital alternatives to traditional money. Cryptocurrencies are managed by networks of computers running open-source software, allowing anyone to join and participate.
- Cryptocurrencies operate without a central authority, making them more open and accessible. Transactions are verified by network participants, ensuring transparency and security. As the popularity of digital currencies grows, they are being increasingly used for payments, investments, and innovative financial services like decentralized finance (DeFi).



Objective

- To analyze historical trends and price movements in the overall cryptocurrency market and the popular cryptocurrencies like Bitcoin, Ethereum, Dogecoin.

Understanding data

SNo	Name	Symbol	Date	High	Low	Open	Close	Volume	Marketcap
1	Aave	AAVE	10/5/2020 23:59	55.11235847	49.78789992	52.67503496	53.21924296	0	89128128.86
2	Aave	AAVE	10/6/2020 23:59	53.40227002	40.73457791	53.29196931	42.40159861	583091.4598	71011441.25
3	Bitcoin	BTC	10/7/2020 23:59	42.40831364	35.97068975	42.39994711	40.08397561	682834.1863	67130036.9
4	Bitcoin	BTC	10/8/2020 23:59	44.90251114	36.69605677	39.88526234	43.76446306	1658816.923	220265142.1
5	Dogecoin	DOGE	10/9/2020 23:59	47.56953274	43.2917758	43.76446306	46.81774415	815537.6608	235632208.2
6	Ethereum	ETH	10/10/2020 23:59	51.4056548	46.70332768	46.81814554	49.13371767	1074627.028	247288428.8
7	Binance coin	BNB	10/11/2020 23:59	51.45337431	48.71603954	49.13312951	49.66072573	692150.6009	249940843.4

The dataset shown provides daily price and market information for various cryptocurrencies, including Bitcoin, Ethereum, and others, over specific dates. Each row represents one cryptocurrency on a particular day, with key columns such as:

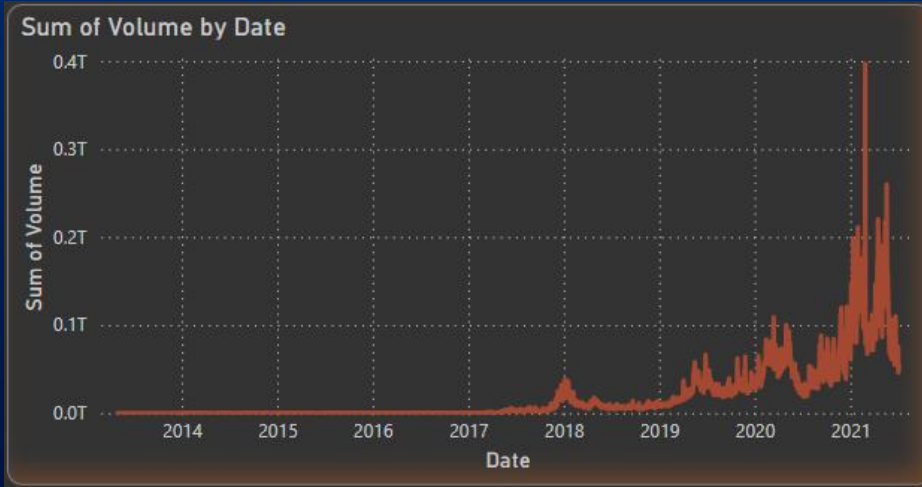
- **Name and Symbol:** Identifies the cryptocurrency.
- **Date:** The exact date and time of the recorded data.
- **High and Low:** The highest and lowest prices reached within the day.
- **Open and Close:** The prices at which the cryptocurrency started and ended the trading day.
- **Volume:** The total trading volume during the day, indicating how much of the cryptocurrency was traded.
- **Marketcap:** The total market capitalization of the cryptocurrency, reflecting its value based on the circulating supply and current price.

Marketcap over the years



- In **2013**, the cryptocurrency market had a modest market cap of **\$1.09 billion**, reflecting its early stages.
- By **September 2021**, the market experienced an extraordinary surge, reaching a peak of **\$1.79 trillion** due to increased adoption, institutional interest.
- However, by the end of 2021, the market stabilized at **\$1.03 trillion**, reflecting market adjustments and maturation.

Volume traded



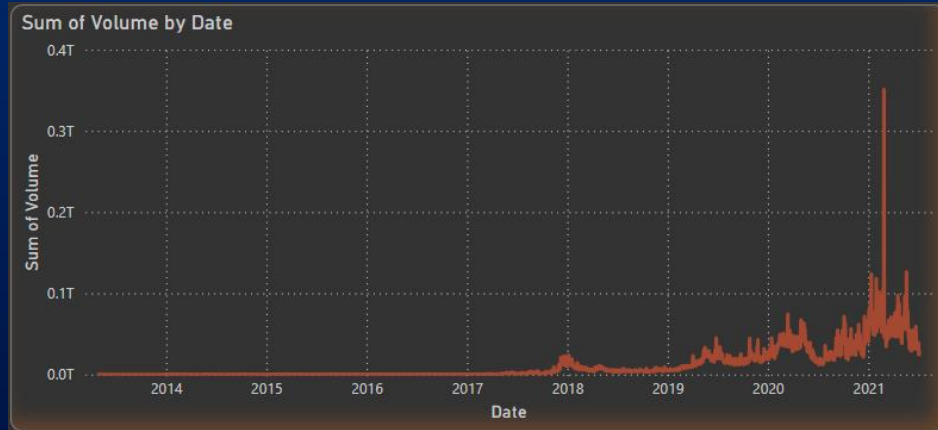
- The data reveals a significant increase in trading volume in the cryptocurrency market over the years.
 - In **2014**, the total volume traded was **21.23 million**, while by the end of 2021, it had grown to **53.23 billion**.
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- The peak trading volume during this period was an impressive 396.81 billion. This massive growth in trading volume highlights the expanding interest and participation in the cryptocurrency market, reflecting its rapid development and adoption globally.

Bitcoin Marketcap



- The chart depicts market capitalization trends from 2013 to 2021, peaking at 1.2 trillion.
- After steady growth from 2013 to 2016, a significant spike occurred in late 2017, followed by a sharp correction in 2018.
- A massive surge from late 2020 led to an all-time high in early 2021, reflecting the volatility of markets.

Bitcoin volume



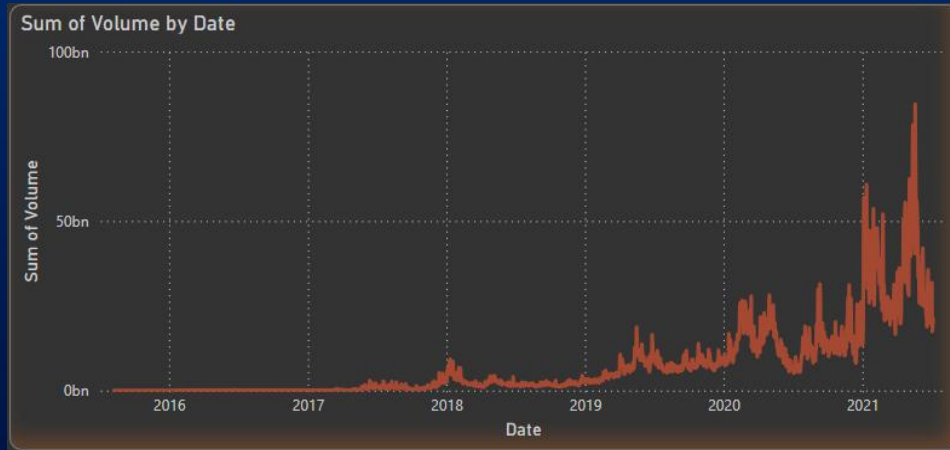
- The chart illustrates trading volume trends from 2013 to 2021, with a peak of nearly 0.4 trillion.
- Minimal activity occurred between 2013 and 2016, followed by an increase in late 2017, which coincides with a market rally.
- After a decline in 2018, volume remained steady until late 2020, when a sharp surge in early 2021 marked unprecedented trading activity, reflecting heightened market speculation.

Ethereum Marketcap



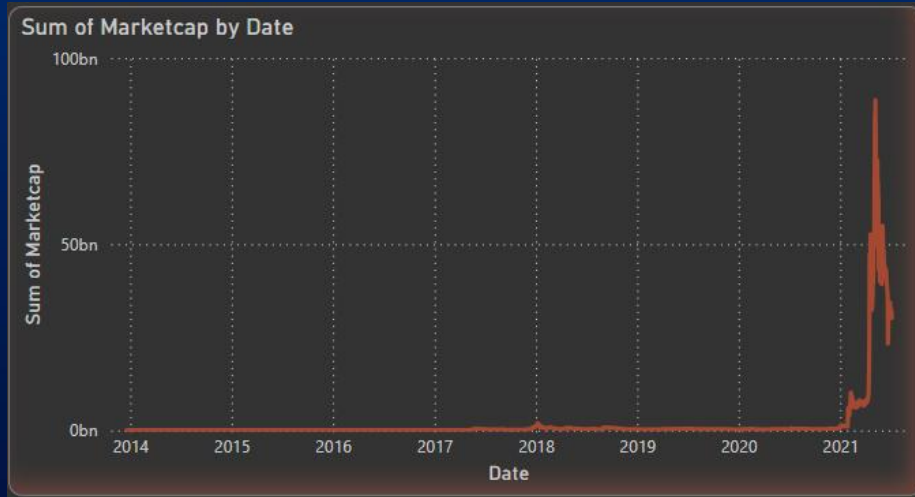
- The data reveals a substantial growth in market capitalization within the cryptocurrency sector over the years.
- Starting with minimal activity in 2016, the market cap saw a sharp rise in late 2017, followed by a correction in 2018.
- By early 2021, the total market cap surged to over 0.4 trillion at its peak.
- This remarkable increase underscores the accelerating global adoption and growing investor interest in the cryptocurrency market, marking its rapid expansion and development.

Ethereum volume



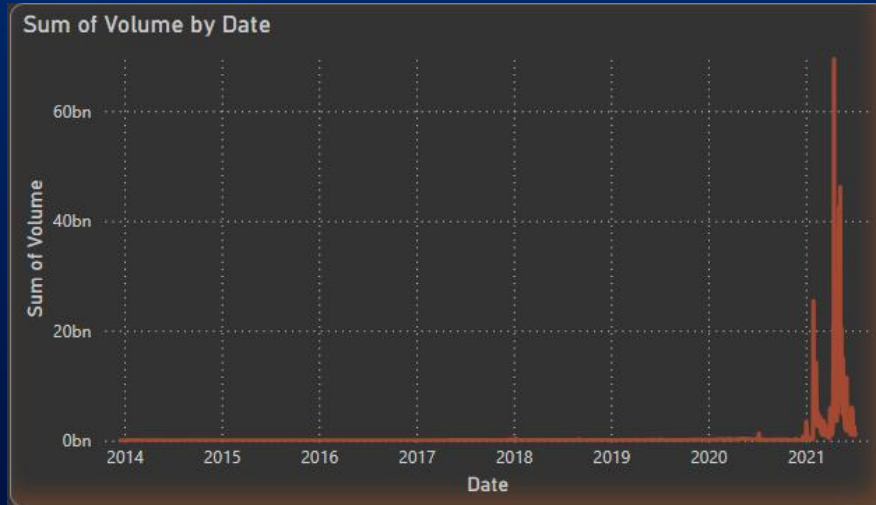
- From 2014 to 2021, ethereum trading volume experienced explosive growth.
 - Initially, trading was minimal, but by 2018, volumes began rising significantly, fueled by growing market interest.
 - The trend accelerated in 2020 and culminated in a dramatic peak during 2021.
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- This surge, driven by factors such as institutional investments and broader adoption, underscores the rapid evolution and increasing integration of cryptocurrencies into the global financial landscape, reflecting their rising prominence and volatility.

Dogecoin Marketcap



- From 2014 to 2021, dogecoin market capitalization experienced a sharp rise.
- Initially, it remained flat, with modest growth starting in 2017.
- However, 2020 and 2021 saw explosive growth, peaking near \$100 billion before a steep decline.
- This surge reflects increasing adoption and investor confidence, while the subsequent drop highlights the volatility inherent in the cryptocurrency market.

Dogecoin Volume



- The line chart shows the steep growth in dogecoin trading volume from 2014 to 2021.
- For several years, trading volume stayed relatively low, showing little movement until 2020.
- In 2021, trading activity surged dramatically, surpassing \$60 billion.
- This significant increase highlights rising market participation, fueled by heightened interest in digital assets, while also emphasizing the market's volatility and speculative dynamics during this period.



Conclusion

- The data reveals that from **2013** to **2021**, the cryptocurrency market underwent significant growth, with market capitalization surging from **\$1.09 billion** in **2013** to a peak of **\$1.79 trillion** in September **2021**.
- Trading **volumes** also followed a similar trajectory, growing from **21.23 million** in **2014** to **53.23 billion** by the end of **2021**, with a peak of **396.81 billion**.
- However, **2020** and **2021** saw particularly **explosive growth**, peaking near **\$100 billion** in market cap, followed by a sharp correction towards the end of **2021**.
- This underscores the rapid expansion and adoption of digital assets, while also highlighting the market's inherent volatility and the adjustments that followed periods of heightened speculation.