



Virtual assets 2022 review and 2023 outlook

January 2023

kpmg.com/cn

2022 was a year of ups and downs for virtual assets

FTX and other bad actors grabbed global headlines, but there was also significant innovation, including progress overcoming blockchain scalability challenges

March: \$600m+ lost in Ronin hack



The Ronin network, which supports the largest blockchain game Axie Infinity, was hacked by North Korean hacking group Lazarus after they gained access to five of the nine Ronin chain validators



March: Crypto donations aid Ukraine

After Russia moved to invade, the Ukrainian government reached out to the crypto community for donations in BTC, ETH and stablecoins, with total funds raised close to \$100m

May: Otherside breaks NFT mint record

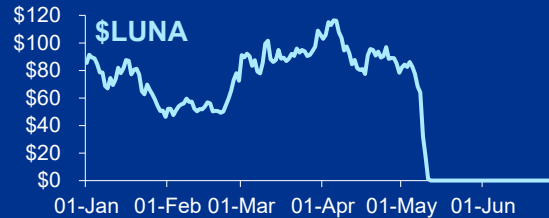


Yuga Labs (creators of BAYC, MAYC) introduced metaverse 'Otherside' and sold 55,000 plots of 'Otherdeed' virtual land NFTs for over \$310m, making it the most significant NFT drop in history

May: Terra collapse



Stablecoin TerraUSD (UST) lost its USD peg, wiping out LUNA, losing approximately \$60b and was the catalyst for the ensuing CeFi credit crisis and contagion



June: Fall of 3AC

Hedge fund Three Arrows Capital (3AC) filed for bankruptcy amidst a liquidity crunch catalysed by the Terra LUNA collapse, with \$3.5b of claims outstanding from creditors and wiping out more than \$1T in crypto market-cap - leaving a trail of destruction



Q2: Liquid staking gaining traction

The adoption of liquid staking protocols grew exponentially in Q2 of 2022, with more than 6m Ether locked in pools worth approximately \$8.45b



August: U.S. Treasury sanctions Tornado Cash

Tornado Cash protocol was added to the sanctions list by OFAC who stated cybercriminals used it to launder over \$1bn of crypto. Developer Alexey Pertsev was arrested following the sanctions for his involvement in writing the code

September: Ethereum 'The Merge'



'The Merge' marked the completion of Ethereum's transition to proof-of-stake (PoS) consensus from proof-of-work (PoW), reducing energy consumption by roughly 99.95%. This marked a significant step in the roadmap to scalability, security and sustainability



October: L2s flip L1s in TPS

Layer 2 blockchains on Ethereum reached higher average transactions per second (TPS) than Layer 1 in October and have maintained that position since, showing positive signs for scalability in the near future

November: Bitcoin falls to two-year low



Bitcoin's price struggled throughout the year and hit a low of \$15,625 on 9 November - its lowest level since November 2020, after Binance retreated from an earlier plan to acquire FTX

November: Collapse of FTX



Crypto giant FTX collapsed into bankruptcy in November, exposing widespread fraud, misappropriation of customer deposits and a complete failure of corporate controls and risk management

2022: Web2 adopt NFTs



Web2 and traditional businesses are exploring NFT utility for brand building, enhancing customer engagement and rewards. Reddit, Instagram, Twitter, and Starbucks are some who have taken the first steps in NFT adoption, paving the way for more widespread crypto adoption

Sources: CoinMarketCap, Messari Research, Chainalysis, CoinDesk, CoinCulture, The Block, Ethereum, CNBC, KPMG research and analysis



© 2023 KPMG Advisory (Hong Kong) Limited, a Hong Kong partnership and a member firm of the KPMG global organisation of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved. Printed in Hong Kong, China.

Document Classification: KPMG Public

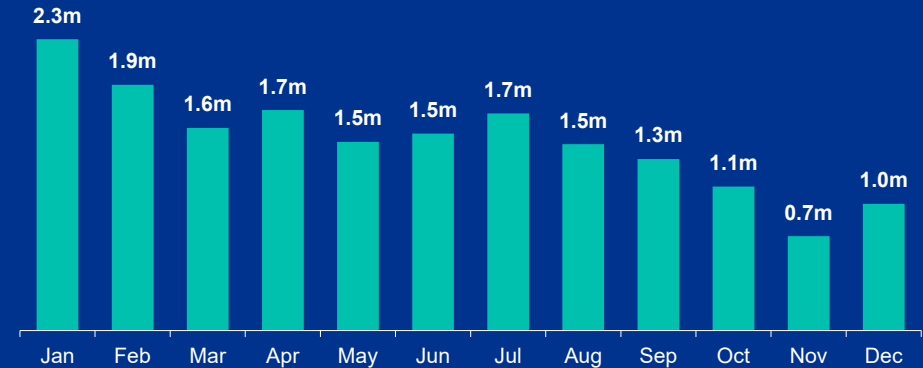
There were significant headwinds across sectors...

Global events left long-term impacts on the broader crypto market which will likely continue throughout 2023

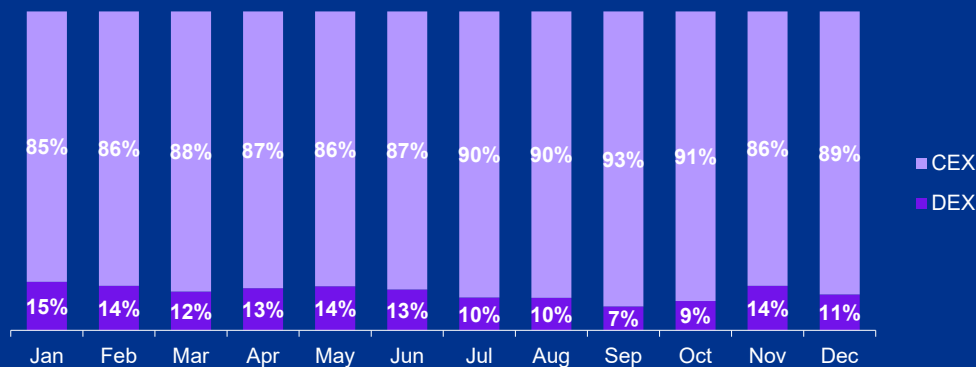
Both BTC and ETH faced overall price declines of over 60% in 2022



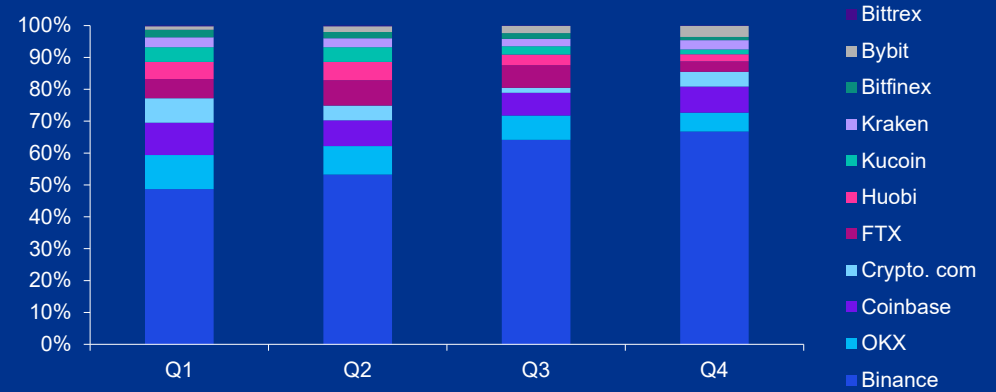
NFTs sales on OpenSea have decreased over 50% from the highs seen in 2021 amidst a macroeconomic downturn and ongoing crypto winter, as well as increased competition



CEXs still made up the majority of spot trading volume in 2022, despite an increase in DEX usage following the FTX bankruptcy in November



Binance remains dominant in the spot cryptocurrency market across top CEXs, but the downfall of FTX resulted in an outflow of assets across exchanges to self custody solutions



Sources: CoinMarketCap, Coinbase, CryptoCompare, Dune Analytics, The Block, KPMG research and analysis



© 2023 KPMG Advisory (Hong Kong) Limited, a Hong Kong partnership and a member firm of the KPMG global organisation of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved. Printed in Hong Kong, China.

Document Classification: KPMG Public

...but we expect the crypto ecosystem will see further growth and evolution in 2023 and beyond

“While it’s fair to say 2022 has been brutal for crypto-fans, this is exactly the point in the cycle where one should be paying attention to new developments and innovation. There are a lot of reasons for optimism and excitement for the future of crypto and Web3. We are starting a new age of build and exploration.”
Barnaby Robson, Partner



Decentralised Social thriving through on-chain interactions and content creation / distribution



New utility of NFTs emerging linked to identity, real-world assets, and loyalty programs



DEX and lending protocols gaining traction underpinned by defined compliance standards and code-enforced transparency



Web3 gaming shifting away from token enthusiasm towards a gameplay-first approach



Further contagion leading to price volatility and market uncertainty



More stringent regulatory framework on CeFi, DeFi, NFTs post-FTX collapse limits innovation and growth



Higher interest rates and tightening monetary policy set to continue through 2023



Wider adoption and positive sentiment towards crypto across retail, HNWI and institutions driven by NFT use-cases



Layer 2's supporting consumer-friendly applications like social media, gaming, and metaverse



Scaling solutions like rollups will see an increasing number of users and transactions



ETH staking will secure yields for investors, while future updates enabling withdrawals reduce risks, attracting participation from centralised players



Lack of real-world utility and energy concerns for PoW result in further headwinds for Bitcoin



Unwillingness to invest in altcoins adversely impacting new projects / protocols



Large offshore crypto exchanges drawing SEC attention, leading to potential sanctions or fines, and driving further bifurcation between US and non-US markets

Sources: Messari Research, Coinbase, CoinDesk, The Block, KPMG research and analysis



© 2023 KPMG Advisory (Hong Kong) Limited, a Hong Kong partnership and a member firm of the KPMG global organisation of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved. Printed in Hong Kong, China.

Document Classification: KPMG Public

Contacts



Barnaby Robson
Partner, Deal Advisory,
Hong Kong
KPMG China
T: +852 2826 7151
E: barnaby.robson@kpmg.com



Tom Jenkins
Head of Financial Risk Management,
Hong Kong
KPMG China
T: +852 2143 8570
E: tom.jenkins@kpmg.com



Paul McSheaffrey
Senior Banking Partner,
Hong Kong
KPMG China
T: +852 6354 2237
E: paul.mcsheaffrey@kpmg.com



Nigel Hobler
Partner, Tax,
Hong Kong
KPMG China
T: +852 2978 8266
E: nigel.hobler@kpmg.com



Jordan Sanders
Associate Director, Deal Advisory,
Hong Kong
KPMG China
T: +852 2913 2552
E: jordan.sanders@kpmg.com



Robert Zhan
Director, Financial Risk Management,
Hong Kong
KPMG China
T: +852 2685 7305
E: robert.zhan@kpmg.com



Christine Tan
Assistant Manager, Deal Advisory,
Hong Kong
KPMG China
T: +852 3927 5757
E: christine.tan@kpmg.com



kpmg.com/socialmedia

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavour to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2023 KPMG Advisory (Hong Kong) Limited, a Hong Kong partnership and a member firm of the KPMG global organisation of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved. Printed in Hong Kong, China.

The KPMG name and logo are trademarks used under license by the independent member firms of the KPMG global organisation.

Document Classification: KPMG Public