

Cryptocurrencies, digital or virtual currencies that leverage cryptography for security, continue to reshape the global financial landscape since their advent in 2009 with Bitcoin. As of August 2021, the total market capitalization of all cryptocurrencies stands at approximately \$2 trillion, demonstrating booming interest despite market turbulence.

Bitcoin remains the leading cryptocurrency, both in terms of market cap and influence. Despite volatile swings, its adoption as a payment and investment tool has expanded. Many businesses, big and small, accept Bitcoin as payment. Countries like El Salvador have adopted Bitcoin as legal tender, highlighting its growing legitimacy.

Ethereum, the second-largest cryptocurrency, has garnered attention because of its integral role in enabling Decentralized Finance (DeFi) and Non-Fungible Tokens (NFTs) --game-changing blockchain applications-- through its smart contract functionality. Ether, Ethereum's native token, has seen its value rise, reflecting its established utility.

However, alternative coins (altcoins) including Binance Coin, Cardano, and XRP, to name a few, are not to be underestimated. Innovative features and thriving ecosystems are driving their growth alongside Bitcoin and Ethereum.

2021 witnessed the proliferation of meme coins like Dogecoin and Shiba Inu, significantly influenced by social media and prominent figures like Elon Musk. Despite criticisms for lack of fundamental value, they attracted ample speculative interest.

Regulatory scrutiny concerning cryptocurrencies has ramped up globally, adding uncertainty to the market. While China has cracked down on cryptocurrency trading and mining, the U.S. is grappling with establishing a regulatory framework due to associated risks like fraud, money laundering, and financial stability while acknowledging its potential benefits. The EU, UK, India, and various other

jurisdictions are also pushing forward with defining crypto regulations.

Environmental concerns, especially around proof-of-work models like Bitcoin which consume considerable energy, have been widely debated. It leads to an increasing push for more sustainable alternatives.

Crypto exchanges have remained dominant in facilitating digital transactions. However, custodial concerns and hacking risks have led to a significant upswing in decentralized exchanges and finance (DEXs and DeFi), with users seeking to maintain control of their digital assets.

Despite significant challenges, including regulatory hurdles, scalability issues, and environmental concerns, cryptocurrencies have shown resilience. They have proven themselves to be more than a passing fad, and market sentiment on balance remains bullish. Their integration into mainstream finance, through means such as exchange-traded funds (ETFs), and their inclusion in institutional portfolios, speak