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The massive potential of decentralized exchanges

Within the decentralized finance (DeFi) sector, decentralized exchanges (DEXs) have firmly established themselves. They provide an alternative to traditional centralized exchanges by enabling users to perform cryptocurrency transactions directly and without the need for an intermediary. Given the rapid changes and increasing significance of DEXs in the crypto world, a thorough understanding of this innovative trading mechanism is essential.

The emergence of decentralized exchanges (DEXs) is closely linked to the development of the blockchain ecosystem, particularly decentralized finance (DeFi). Smart contracts, self-executing agreements written directly in code, facilitate peer-to-peer transactions on DEXs without the need for a middleman. This effectively eliminates the counterparty risk associated with traditional centralized exchanges. Users no longer have to entrust their assets to a third party.

Furthermore, Automated Market Makers (AMMs) represent a revolutionary paradigm shift from traditional market maker models and form the core of DEXs. Unlike traditional market makers that act as intermediaries to provide liquidity in financial markets, AMMs rely on an algorithmic model. This model is based on liquidity pools instead of generating individual buy and sell orders.

Democratization of Liquidity

With DEXs, users have the opportunity to deposit their assets into pools and receive liquidity tokens representing their share in the pool. The pricing for token trading in AMM pools follows a mathematical model based on the proportions of assets present in the pool, such as ETH/USDC, for example. This process is fully automated and does not require active management by a human market maker. As a result, potential human errors are eliminated, and the efficiency and democratization of the process are increased. Everyone has the opportunity to participate in the pool, and providing liquidity is

rewarded with a portion of the transaction fees that is proportionate to one's share in the liquidity pool.

A viable alternative to centralized exchanges

In the traditional financial world, there is always an inherent counterparty risk. This risk refers to the possibility of one party in a transaction failing to fulfill their contractual obligations. Customers of centralized exchanges (CEXs) are exposed to this risk as the platform acts as a third party and has control over customer funds. In contrast, decentralized exchanges (DEXs) eliminate this risk by relying on blockchain technology and utilizing smart contracts to facilitate asset exchanges. No third party intervention is required. The FTX bankruptcy illustrated this counterparty risk associated with centralized exchanges (CEXs) in a painful manner.

Ultimately, DEXs offer increased transparency and trustworthiness, as all transactions conducted on the blockchain are public and traceable, which is often challenging to achieve in CEX environments. While "proof of reserves" by centralized entities provides some insight, they can also be manipulated.

Key elements for a trading revolution

While centralized exchanges (CEXs) offer user-friendliness and speed, decentralized exchanges (DEXs) enable global access without limitations. The inherent nature of the blockchain being "permissionless" expands the inclusivity and accessibility of decentralized exchanges by allowing anyone to participate in liquidity pools. This



borderless access enables thousands of people in different countries, regardless of their wealth, to participate in a liquidity pool, thus creating a truly global and inclusive financial infrastructure.

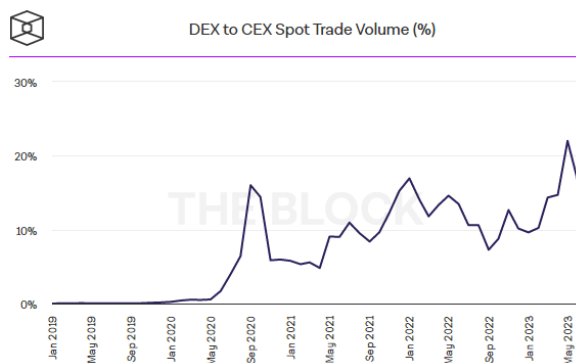


Figure 1: Trading volumes on decentralized vs. centralized exchanges | Source: The Block, CoinGecko

Since their inception, the volume of decentralized exchanges (DEXs) has continuously increased and now represents 16% of the total cryptocurrency trading volume. Despite their relatively small share of the overall volume, the long-term trend is clear. Ultimately, decentralized exchanges offer tremendous potential as market participants increasingly focus their attention on them. Already today, Uniswap, the largest decentralized exchange, processes approximately \$8 billion in transactions per week and has decentralized liquidity books worth \$4 billion.



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