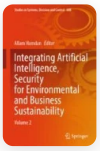
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Impact of Token Economics on AMM Efficiency

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Abstract

This study examines the impact of token economic models on Automated Market Maker (AMM) efficiency in decentralized finance. Analyzing historical blockchain data, it investigates relationships between token attributes and AMM performance metrics using correlation analyses and regression models. Key findings show governance tokens generally enhance AMM efficiency, while liquidity mining programs increase market depth initially. The research highlights complex interactions between token economics and market dynamics, emphasizing the need for adaptive protocol design strategies. Recommendations include implementing structured governance tokens, sustainable liquidity mining, and protocol adaptability. Future research areas include longitudinal studies on token effects and optimal economic models balancing efficiency, stability, and regulatory compliance.

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