



## Enhancing Tokenomics: A Comparative Study of Token Burning and Liquidity Pool Strategies for Sustainable Ecosystem Growth

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**Abstract:** This research explores the comparative efficacy of token burning and liquidity pools as mechanisms to optimize tokenomics within blockchain ecosystems. Token burning, often used to create scarcity and drive value, has been critiqued for its short-term focus and limited contribution to ecosystem growth. Alternatively, liquidity pools, which pair tokens with stablecoins or cryptocurrencies on decentralized exchanges, offer a more sustainable approach by enhancing price stability, incentivizing community participation, and fostering long-term engagement. This study outlines a comprehensive framework for implementing liquidity pools, highlighting their advantages over token burning, such as creating recurring revenue for liquidity providers, mitigating volatility, and ensuring transparency. By leveraging liquidity pools, projects can align stakeholder incentives, build robust ecosystems, and achieve sustainable growth, positioning this approach as a superior alternative to token burning in most contexts.

**Keywords:** Tokenomics, Liquidity pooling, crypto currency, leveraging, long term engagement

### 1. Introduction

Tokenomics, the economic structure underpinning blockchain ecosystems, plays a pivotal role in determining the success and sustainability of cryptocurrency projects. Among the strategies





employed to regulate token supply and demand, token burning and liquidity pools have emerged as two prominent approaches. Token burning involves permanently removing tokens from circulation to reduce supply, often with the intention of increasing scarcity and value. While effective in creating a deflationary narrative, token burning has been criticized for its inability to address ecosystem sustainability and price stability in the long run. Liquidity pools, on the other hand, present a more dynamic and community-driven alternative. By pairing tokens with stablecoins or other cryptocurrencies on decentralized exchanges (DEXs), liquidity pools facilitate smoother trading, stabilize prices, and incentivize community participation through revenue-sharing mechanisms. This approach not only fosters long-term engagement but also creates a foundation for sustainable growth by aligning the interests of token holders, liquidity providers, and project developers. This research aims to evaluate the strengths and limitations of both approaches, proposing a comprehensive framework for adopting liquidity pools as a superior alternative to token burning. By examining key components, implementation strategies, and the advantages of liquidity pools, this study seeks to provide actionable insights for blockchain projects striving for economic stability and growth.

## 1.1 Liquidity Pools

Liquidity pools are a foundational element of decentralized finance (DeFi), designed to facilitate efficient and trustless trading of cryptocurrencies on decentralized exchanges (DEXs). At their core, liquidity pools are smart contracts that hold reserves of two or more tokens, enabling automated trading without the need for a traditional order book. These pools rely on algorithms, such as automated market makers (AMMs), to determine the price of tokens based on their relative supply within the pool. The creation of liquidity pools involves pairing tokens, such as a native project token with a stablecoin (e.g., USDT or USDC), to ensure liquidity and reduce price volatility. Liquidity providers (LPs) contribute their assets to these pools, earning rewards in the form of transaction fees and, in some cases, additional token incentives. This model not only stabilizes the token's market but also incentivizes community participation, making it a powerful tool for fostering engagement and trust within the ecosystem. One of the key advantages of liquidity pools is their ability to democratize access to trading and liquidity provision. By eliminating intermediaries and allowing anyone to participate, liquidity pools create a more





inclusive and transparent financial system. Moreover, they offer a sustainable mechanism for generating revenue, as transaction fees are shared among LPs, aligning their interests with the long-term success of the project. This introduction highlights the transformative potential of liquidity pools in reshaping tokenomics, offering a robust alternative to traditional methods like token burning. By fostering liquidity, price stability, and community involvement, liquidity pools have emerged as a cornerstone of modern DeFi ecosystems.

## 1.2 Token Burning

Token burning is a widely adopted mechanism in blockchain ecosystems designed to regulate the supply of tokens and create scarcity. The process involves permanently removing tokens from circulation by sending them to an irretrievable wallet address, effectively reducing the total supply. This strategy is often employed to increase the perceived value of the remaining tokens, as reduced supply coupled with stable or increasing demand can lead to higher token prices. The concept of token burning aligns with deflationary economics, where scarcity is leveraged to drive value. Token burns are typically implemented during initial coin offerings (ICOs), periodic burn events, or as part of transaction fees within the ecosystem. Some projects tie token burns to their revenue streams, burning a percentage of profits or transaction fees to maintain ongoing deflation. While token burning is straightforward and easy to execute, its impact is largely short-term and speculative. Critics argue that it does not contribute to the long-term sustainability or utility of the ecosystem. The absence of additional incentives for stakeholders and the potential for price manipulation are notable concerns associated with this approach. Despite these limitations, token burning remains a popular strategy due to its simplicity and immediate impact on tokenomics. However, the emergence of alternative mechanisms, such as liquidity pools, highlights the need for more dynamic and sustainable approaches to managing token ecosystems.

## 2. Related Work

**Gupta, M., Gupta, D., & Duggal, A. (2023). NFT Culture: A New Era.**

This study explores the burgeoning culture of NFTs (Non-Fungible Tokens) and their transformative impact on digital art, collectibles, and virtual ownership. It examines how NFTs have reshaped market dynamics and provided creators with new avenues for monetization while





discussing the broader cultural implications in the digital age, including the evolving role of virtual assets in mainstream media and entertainment.

**Gupta, D., & Gupta, S. (2023). Exploring World Famous NFT Scripts: A Global Discovery.**

This article delves into the technological and artistic aspects of well-known NFT scripts that have gained global prominence. By exploring various use cases and the underlying smart contracts, the paper assesses the scalability, security, and functionality of NFT platforms, shedding light on how these scripts are used in different industries such as gaming, virtual real estate, and art.

**M. Gupta, “Reviewing the Relationship Between Blockchain and NFT With World Famous NFT Marketplaces”.**

This review focuses on the intersection of blockchain technology and NFTs, analyzing the technological foundations that support popular NFT marketplaces. The study highlights the importance of blockchain in ensuring transparency, security, and authenticity in NFT transactions. It provides an in-depth comparison of major NFT platforms, exploring their technological differences and their influence on the overall NFT market.

**R. Gupta, M. Gupta, and D. Gupta, “Role of Liquidity Pool in Stabilizing Value of Token”.**

This article investigates how liquidity pools play a crucial role in stabilizing token values. The authors analyze the mechanics of liquidity provision in decentralized finance (DeFi) platforms and how these pools contribute to reducing volatility and improving token liquidity. The research also discusses the incentives and risks for liquidity providers, emphasizing their role in the broader ecosystem.

**M. Gupta and D. Gupta, “Investigating Role of Blockchain in Making your Greetings Valuable”.**

This paper explores the potential of blockchain technology to enhance the value of digital greetings, such as e-cards or personalized messages, by embedding them with unique, verifiable tokens. The authors examine how blockchain can ensure the authenticity and scarcity of digital greetings, adding a layer of value and social significance to these traditionally intangible products.

**R. Issalh, A. Gupta, and M. Gupta, “PI Network: A Revolution”.**





This article focuses on the PI Network, a new cryptocurrency platform that aims to provide an accessible and decentralized blockchain experience. The authors evaluate the platform's potential to revolutionize digital currency mining by making it more accessible to a global audience through mobile devices. They analyze its design, network security, and long-term viability in comparison to other blockchain technologies.

**A. Duggal, M. Gupta, and D. Gupta, “Significance Of NFT Avataars In Metaverse And Their Promotion: Case Study”.**

This case study investigates the role of NFT avatars in the metaverse, exploring how these digital representations of users have gained value and popularity. The authors highlight the importance of NFT avatars as a tool for self-expression, identity, and community engagement in virtual worlds, as well as strategies for promoting and increasing their adoption in the metaverse ecosystem.

**M. Gupta, “Say No to Speculation in Crypto Market During NFT Trades: Technical and Financial Guidelines”.**

This work presents a critique of the speculative nature of the cryptocurrency market, particularly during NFT trades. The author provides a set of technical and financial guidelines aimed at reducing speculation-driven volatility in NFT markets. The paper emphasizes the importance of education, risk management, and transparency to ensure sustainable market growth.

**A. Singla, M. Singla, and M. Gupta, “Unpacking the Impact of Bitcoin Halving on the Crypto Market: Benefits and Limitations”.**

This research examines the phenomenon of Bitcoin halving and its implications for the cryptocurrency market. By analyzing historical data, the authors explore how halving events influence Bitcoin's price, miner behavior, and overall market dynamics. They also discuss the limitations and potential risks associated with Bitcoin halving and its long-term effects on the cryptocurrency ecosystem.

**Gupta and P. Jain, “Expected Impact of Decentralization Using Blockchain-Based Technologies”.**

This paper investigates the potential impact of decentralization, facilitated by blockchain technologies, on industries such as finance, governance, and supply chain management. The authors analyze the shift from centralized models to decentralized systems, discussing both the opportunities and challenges that blockchain introduces to various sectors.





**D. Gupta and S. Gupta, “Exploring World Famous NFT Scripts: A Global Discovery”.**

This article revisits the topic of NFT scripts, further exploring how the coding and smart contracts behind the most famous NFT projects have shaped the digital landscape. The study examines how global platforms and artists utilize these scripts for scalability, security, and creative expression.

**M. Gupta, “Integration of IoT and Blockchain for User Authentication”.**

This paper discusses the integration of the Internet of Things (IoT) with blockchain for enhanced user authentication in digital systems. The authors propose a framework for securing IoT devices and user identities through blockchain, ensuring transparency and data integrity. This integration could transform sectors such as healthcare, smart homes, and automotive industries by improving security protocols.

**A. Singla and M. Gupta, “Investigating Deep Learning Models for NFT Classification: A Review”.**

This review focuses on the application of deep learning models to classify and analyze NFTs. The authors evaluate various machine learning techniques, including neural networks, that have been used to categorize NFT assets based on traits such as art style, creator, and rarity. The paper emphasizes the potential for AI to improve the discoverability and value prediction of NFTs.

**Issalh, R., Gupta, D., & Gupta, M. (2023). Researcher Economy: A Revolution By 9nftmania For Present Alpha Male.**

This article explores the concept of the "researcher economy" facilitated by 9NFTMANIA, focusing on how NFTs are reshaping the way researchers, creators, and professionals monetize their intellectual work. The paper examines the role of NFTs in creating new economic models for knowledge-sharing and intellectual property ownership in academic and professional circles.

**Gupta, D. (2024). The Role of Volunteers vs. Investors and Speculators in the Cryptocurrency Market: A Comparative Study of Reputation and Value Building.**

This comparative study investigates the roles of different participants in the cryptocurrency market, particularly volunteers, investors, and speculators. The author analyzes how each group contributes to the reputation and value-building of cryptocurrencies, with an emphasis on ethical considerations, long-term growth, and market sustainability.

**Singla, A. (2024). Reviewing Limited Supply Crypto Projects: ULTIMA, COREDAOVIP.**





This research reviews limited supply cryptocurrency projects, with a particular focus on ULTIMA and COREDAOVIP. The paper evaluates how the scarcity of tokens in these projects impacts their value, investor behavior, and market positioning. The study also discusses the advantages and challenges associated with such projects in the volatile crypto market.

**Ashutosh, & Gupta, M. (2024). Investigating the Narrative of Trinity: 9NFTMANIA, Premium Domain, COREDAOVIP.**

This paper explores the narrative behind the Trinity concept, which includes 9NFTMANIA, Premium Domain, and COREDAOVIP. The authors examine how these projects are interconnected in terms of marketing, token utility, and community engagement, and assess the potential of these projects to drive forward the narrative of value creation in the NFT and cryptocurrency space.

**Singla, A. (2024). Exploring Liquidity Pooling and Automated Trading with COREDAOVIP Token in Decentralized Exchanges.**

This article investigates the role of liquidity pooling and automated trading strategies with the COREDAOVIP token in decentralized exchanges. The author analyzes how liquidity pooling contributes to market efficiency, reduces volatility, and provides opportunities for token holders to earn rewards. The paper discusses the benefits and challenges of these strategies in the DeFi space.

**Meenu. (2024). COREDAO.VIP: Crypto-Based Liquidity Pool Creation for Profit Maximization.**

This study examines the creation of crypto-based liquidity pools within the COREDAO.VIP ecosystem. The paper focuses on how liquidity pools can be used to maximize profits for token holders by leveraging automated trading systems and incentivizing liquidity providers. It evaluates the risks and rewards of participating in such pools within the context of the broader crypto market. Each of these studies contributes to the ongoing discourse surrounding blockchain technology, cryptocurrency markets, NFTs, and decentralized finance (DeFi), providing insights into their roles in shaping the future of digital economies and ecosystems. Here is a table summarizing the existing research mentioned:

**Table 1 Related Work Summary**

Reference	Title	Year	Focus Area	Key Insights
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Gupta, M., Gupta, D., & Duggal, A.	NFT Culture: A New Era	2023	NFT Culture	Explores the impact of NFTs on digital art, collectibles, and virtual ownership.
Gupta, D., & Gupta, S.	Exploring World Famous NFT Scripts: A Global Discovery	2023	NFT Scripts	Analyzes famous NFT scripts, their scalability, and technological foundations.
M. Gupta	Reviewing the Relationship Between Blockchain and NFT With World Famous NFT Marketplaces	2023	Blockchain and NFTs	Examines the technological role of blockchain in NFT marketplaces and their influence.
R. Gupta, M. Gupta, and D. Gupta	Role of Liquidity Pool in Stabilizing Value of Token	2023	Liquidity Pools	Investigates the role of liquidity pools in token stability and decentralized finance (DeFi).
M. Gupta and D. Gupta	Investigating Role of Blockchain in Making your Greetings Valuable	2023	Blockchain in Greetings	Discusses how blockchain enhances the value of digital greetings through authentication and scarcity.
R. Issalh, A. Gupta, and M. Gupta	PI Network: A Revolution	2023	PI Network	Examines the impact of PI Network on cryptocurrency accessibility and mobile mining.
A. Duggal, M. Gupta, and D. Gupta	Significance of NFT Avatars in Metaverse and Their Promotion: Case Study	2023	NFT Avatars in Metaverse	Explores the significance of NFT avatars for self-expression and promotion in virtual worlds.







M. Gupta	Say No to Speculation in Crypto Market During NFT Trades: Technical and Financial Guidelines	2023	Speculation in Crypto	Provides technical guidelines to reduce speculation and volatility in NFT trades.
A. Singla, M. Singla, and M. Gupta	Unpacking the Impact of Bitcoin Halving on the Crypto Market	2023	Bitcoin Halving	Analyzes the effects of Bitcoin halving on price, market dynamics, and mining behavior.
Gupta and P. Jain	Expected Impact of Decentralization Using Blockchain-Based Technologies	2023	Decentralization and Blockchain	Investigates the potential of decentralization through blockchain in various sectors.
D. Gupta and S. Gupta	Exploring World Famous NFT Scripts: A Global Discovery	2023	NFT Scripts	Revisits the topic of NFT scripts and explores how they shape the digital landscape.
M. Gupta	Integration of IoT and Blockchain for User Authentication	2023	IoT and Blockchain	Discusses the integration of IoT with blockchain for secure user authentication.
A. Singla and M. Gupta	Investigating Deep Learning Models for NFT Classification: A Review	2023	Deep Learning and NFTs	Reviews deep learning models for NFT classification and their potential applications.
Issalh, R., Gupta, D., & Gupta, M.	Researcher Economy: A Revolution by 9NFTMANIA for Present Alpha Male	2023	9NFTMANIA	Explores how 9NFTMANIA is creating a new "researcher economy" for intellectual property.





Gupta, D.	The Role of Volunteers vs. Investors and Speculators in the Cryptocurrency Market	2024	Volunteers vs. Investors	Compares the roles of volunteers, investors, and speculators in building cryptocurrency reputation and value.
Singla, A.	Reviewing Limited Supply Crypto Projects: ULTIMA, COREDAOVIP	2024	Limited Supply Cryptos	Reviews limited supply crypto projects ULTIMA and COREDAOVIP, focusing on scarcity and token value.
Ashutosh, & Gupta, M.	Investigating the Narrative of Trinity: 9NFTMANIA, Premium Domain, COREDAOVIP	2024	Trinity Narrative	Explores the interconnected narrative of 9NFTMANIA, Premium Domain, and COREDAOVIP in token utility and value creation.
Singla, A.	Exploring Liquidity Pooling and Automated Trading with COREDAOVIP Token in Decentralized Exchanges	2024	Liquidity Pools	Investigates liquidity pooling and automated trading strategies in decentralized exchanges.
Meenu	COREDAO.VIP: Crypto-Based Liquidity Pool Creation for Profit Maximization	2024	Crypto Liquidity Pools	Examines how crypto-based liquidity pools in COREDAO.VIP can maximize profits for token holders.

This table captures the focus, key insights, and links to each of the referenced studies, providing a consolidated overview of the research in the fields of blockchain, NFTs, liquidity pools, and decentralized finance.





## 2. Framework for Creating Liquidity Pools as an Alternative to Token Burning

**Objective:** To replace the practice of burning tokens with the creation of liquidity pools, ensuring price stability, incentivizing community participation, and fostering long-term growth for the token ecosystem.

### Key Components of the Framework

#### 1. Liquidity Pool Design

- **Pair Selection:** Pair the token with stablecoins (e.g., USDT, USDC) or major cryptocurrencies (e.g., ETH, BTC) to maintain liquidity and reduce volatility.
- **Decentralized Platform:** Utilize decentralized exchanges (DEXs) like Uniswap, PancakeSwap, or SushiSwap to establish and manage liquidity pools.
- **Initial Funding:** Allocate a portion of the project's reserve tokens and equivalent stablecoins/cryptocurrency to seed the liquidity pool.

#### 2. Incentivizing Liquidity Providers (LPs)

- **Revenue Sharing:** Allow LPs to earn trading fees generated from transactions within the pool.
- **Token Rewards:** Introduce additional incentives, such as governance tokens or bonus tokens, to attract and retain LPs.
- **Time-Based Rewards:** Offer higher rewards for early participants or those who lock their funds for longer periods.

#### 3. Governance and Transparency

- **Community Governance:** Empower token holders to vote on pool-related parameters, such as fee percentages, reward distributions, and future changes.
- **Transparency Tools:** Provide real-time analytics and reports on pool performance, trading volumes, and liquidity levels.

#### 4. Revenue Allocation Model

- **Trading Fees:** A percentage of transaction fees is distributed among LPs as revenue.
- **Community Fund:** Dedicate a portion of trading fees to a community fund for ecosystem development, marketing, or charitable initiatives.





- Project Treasury: Optionally allocate a small share to the project treasury for operational sustainability.

### 5. Mitigating Risks

- Impermanent Loss Protection: Educate LPs on impermanent loss and implement strategies such as insurance pools to mitigate risks.
- Audits: Conduct regular smart contract audits to ensure security and prevent vulnerabilities.
- Emergency Withdrawals: Include mechanisms for LPs to withdraw funds in case of unforeseen events.

## 3. Implementation Steps

### 1. Research and Development:

- Analyze the token's trading history and volatility.
- Choose the most appropriate platform and token pairs for liquidity pools.

### 2. Community Engagement:

- Educate the community on the benefits of liquidity pools over token burning.
- Host AMAs and publish documentation explaining the framework and rewards.

### 3. Launching the Liquidity Pool:

- Seed the pool with initial liquidity from the project's reserves.
- Announce the pool launch, along with details on rewards and fees.

### 4. Monitoring and Optimization:

- Continuously monitor pool performance and adjust parameters as needed.
- Gather feedback from LPs and the community for further improvements.

## Advantages of the Liquidity Pool Approach

- Price Stability: Reduces token volatility by ensuring sufficient liquidity.
- Ecosystem Growth: Encourages active participation and aligns incentives.
- Sustainability: Creates a recurring revenue model for the project and LPs.
- Transparency: Builds trust through decentralized and auditable mechanisms.

By replacing token burning with liquidity pools, this framework offers a more sustainable, community-driven approach to managing tokenomics. It ensures price stability, incentivizes





stakeholders, and fosters long-term ecosystem growth. This strategy can position the token as a stable and reliable asset in the competitive crypto market.

#### 4. Token Burning VS Liquidity Pooling

Choosing between burning tokens and creating liquidity pools depends on the goals and context of your token project. Here's an objective comparison of the two approaches:

##### 1. Token Burning

###### Advantages:

- **Supply Reduction:** Decreases the circulating supply, potentially increasing token scarcity and value.
- **Market Perception:** Creates an impression of exclusivity and deflationary economics, which can appeal to investors.
- **Simple Mechanism:** Easy to implement and understand without requiring ongoing management.

###### Limitations:

- **Short-Term Focus:** Value increase due to burning might be temporary and speculative, as it doesn't directly contribute to ecosystem utility or liquidity.
- **Lack of Utility:** Burning tokens removes them from circulation without adding to the ecosystem's functionality or stability.
- **No Incentives:** Does not engage the community or incentivize participation.

##### 2. Liquidity Pools

###### Advantages:

- **Price Stability:** Ensures smooth trading by reducing price volatility through higher liquidity.
- **Community Engagement:** Incentivizes participation by rewarding liquidity providers with trading fees and/or tokens.
- **Ecosystem Growth:** Creates a sustainable foundation for token trading and utility, fostering long-term project growth.
- **Revenue Generation:** Trading fees benefit liquidity providers and can also fund project development.





**Limitations:**

- Complexity: Setting up and managing liquidity pools requires technical knowledge and ongoing monitoring.
- Impermanent Loss Risk: Liquidity providers may face risks if the token price fluctuates significantly.
- Higher Initial Capital: Requires a substantial reserve of tokens and pairing assets to seed the pool effectively.

**Comparison of Token Burning and Liquidity Pool Strategies**

This comparison shows how token burning can drive short-term value creation through reduced supply, while liquidity pool strategies foster ongoing growth and sustainability by encouraging liquidity and long-term participation in the ecosystem. Here’s a table comparing the study of Token Burning and Liquidity Pool Strategies for enhancing tokenomics and ensuring sustainable ecosystem growth:

**Table 2 Comparison of Token Burning and Liquidity Pool Strategies**

Aspect	Token Burning	Liquidity Pool Strategies
<b>Definition</b>	Token burning refers to the process of permanently removing a certain number of tokens from circulation, reducing the total supply.	Liquidity pool strategies involve incentivizing users to provide liquidity to decentralized exchanges (DEXs) or other platforms to facilitate trading and price stability.
<b>Purpose</b>	<ul style="list-style-type: none"> <li>- Reduce token supply to increase scarcity.</li> <li>- Enhance token value by lowering circulating supply.</li> </ul>	<ul style="list-style-type: none"> <li>- Ensure liquidity for token trading.</li> <li>- Encourage long-term user participation and ecosystem stability.</li> </ul>
<b>Effect on Tokenomics</b>	<ul style="list-style-type: none"> <li>- Potential increase in the value of remaining tokens.</li> <li>- Creates scarcity, thus possibly improving market perception.</li> </ul>	<ul style="list-style-type: none"> <li>- Provides liquidity to facilitate trades, reducing slippage and volatility.</li> <li>- Can reward users with transaction fees or governance tokens.</li> </ul>





<b>Impact on Ecosystem</b>	<ul style="list-style-type: none"> <li>- Short-term value appreciation by reducing supply.</li> <li>- Potential to reduce inflation in the token economy.</li> </ul>	<ul style="list-style-type: none"> <li>- Long-term ecosystem growth through continuous liquidity and rewards.</li> <li>- Encourages token staking and holding by liquidity providers.</li> </ul>
<b>Risks</b>	<ul style="list-style-type: none"> <li>- Can negatively impact market if executed too often or without clear utility.</li> <li>- Short-term market fluctuations.</li> </ul>	<ul style="list-style-type: none"> <li>- Impermanent loss for liquidity providers.</li> <li>- Volatility and risks in the value of paired tokens.</li> </ul>
<b>Benefits</b>	<ul style="list-style-type: none"> <li>- Helps maintain or increase token value by creating scarcity.</li> <li>- Can serve as a marketing tool to create hype.</li> </ul>	<ul style="list-style-type: none"> <li>- Facilitates efficient market trading.</li> <li>- Promotes decentralized finance (DeFi) growth.</li> <li>- Encourages ecosystem participation and retention.</li> </ul>
<b>Usage Frequency</b>	<ul style="list-style-type: none"> <li>- Usually done in periodic burns or based on predetermined rules.</li> <li>- Not frequent but impactful when used strategically.</li> </ul>	<ul style="list-style-type: none"> <li>- Continuous as long as liquidity providers participate.</li> <li>- Ongoing, dynamic strategy that requires constant monitoring.</li> </ul>
<b>Potential for Long-Term Growth</b>	Limited impact on long-term growth beyond the reduction in supply.	Higher potential for long-term growth as liquidity pools enable ongoing trading and ecosystem participation.
<b>Governance Impact</b>	Some projects tie token burns to governance, where community votes determine burn events.	Can be tied to governance models where liquidity providers have a say in pool management and rewards.
<b>Examples</b>	<ul style="list-style-type: none"> <li>- Binance Coin (BNB) regularly burns tokens to reduce supply.</li> <li>- Ethereum’s EIP-1559 introduced a burn mechanism for transaction fees.</li> </ul>	Uniswap, Sushiswap, and PancakeSwap allow users to provide liquidity for token pairs in exchange for rewards.





<b>Sustainability</b>	Provides temporary scarcity but may not be sustainable if overused.	Provides a more sustainable model for liquidity and rewards, benefiting long-term ecosystem growth.
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### 5. Which is Better?

Liquidity pools are generally a better choice for long-term ecosystem growth and price stability. While token burning might provide a temporary boost in value, liquidity pools build a sustainable trading environment, incentivize community participation, and align the interests of stakeholders. However, the decision also depends on the project's objectives:

- If the goal is short-term hype or to signal deflationary intent, token burning might be effective.
- If the goal is long-term stability, ecosystem engagement, and utility, liquidity pools are superior.

### 6. Conclusion

In conclusion, creating liquidity pools is a more sustainable and community-focused approach than token burning. While token burning may offer short-term benefits through supply reduction and speculative price increases, liquidity pools provide long-term advantages such as price stability, ecosystem growth, and active community participation. By incentivizing liquidity providers and ensuring a stable trading environment, liquidity pools align the interests of all stakeholders and contribute to the token’s ongoing utility and success. For projects seeking sustainable growth and deeper community engagement, liquidity pools are the better choice.

### 7. Future Scope of Research

By addressing these research areas, blockchain projects can refine their tokenomics strategies and further leverage liquidity pools to build robust, sustainable ecosystems. The adoption of liquidity pools as a replacement for token burning presents several avenues for future research:

- **Comparative Studies Across Blockchains:** Analyze the effectiveness of liquidity pools across different blockchain platforms (e.g., Ethereum, Binance Smart Chain, Solana).







Assess the impact of blockchain-specific factors, such as transaction fees and scalability, on the success of liquidity pools.

- **Advanced Incentive Models:** Investigate innovative incentive structures for liquidity providers, such as dynamic reward mechanisms or gamification techniques. Explore the integration of real-world assets and synthetic tokens into liquidity pools.
- **Long-Term Economic Impact:** Study the long-term effects of liquidity pools on token price stability and market resilience. Evaluate how liquidity pools influence investor behavior and community engagement.
- **Risk Management Strategies:** Develop advanced tools to mitigate risks such as impermanent loss and smart contract vulnerabilities. Examine the role of decentralized insurance protocols in safeguarding liquidity providers.
- **Interoperability and Cross-Chain Liquidity:** Explore the potential for cross-chain liquidity pools and their impact on tokenomics. Investigate the role of interoperability protocols in enhancing liquidity across multiple ecosystems.
- **Regulatory and Legal Considerations:** Analyze the legal and regulatory challenges associated with implementing liquidity pools. Study how global compliance frameworks can impact the adoption and operation of liquidity pools.

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### References

- Gupta, M., Gupta, D., & Duggal, A. (2023). NFT Culture: A New Era. *Scientific Journal of Metaverse and Blockchain Technologies*, 1(1), 57–62. <https://doi.org/10.36676/sjmbt.v1i1.08>
- Gupta, D., & Gupta, S. (2023). Exploring world famous NFT Scripts: A Global Discovery. *Scientific Journal of Metaverse and Blockchain Technologies*, 1(1), 63–71. <https://doi.org/10.36676/sjmbt.v1i1.09>





- M. Gupta, “Reviewing the Relationship Between Blockchain and NFT With World Famous NFT Market Places”, SJMBT, vol. 1, no. 1, pp. 1–8, Dec. 2023.
- R. Gupta, M. Gupta, and D. Gupta, “Role of Liquidity Pool in Stabilizing Value of Token”, SJMBT, vol. 1, no. 1, pp. 9–17, Dec. 2023. DOI: <https://doi.org/10.36676/sjmbt.v1i1.02>
- M. GUPTA and D. Gupta, “Investigating Role of Blockchain in Making your Greetings Valuable”, URR, vol. 10, no. 4, pp. 69–74, Dec. 2023. DOI: <https://doi.org/10.36676/urr.2023-v10i4-009>
- R. Issalh, A. Gupta, and M. Gupta, “PI Network : A Revolution”, SJMBT, vol. 1, no. 1, pp. 18–27, Dec. 2023. DOI: <https://doi.org/10.36676/sjmbt.v1i1.03>
- A. Duggal, M. Gupta, and D. Gupta, “Significance Of Nft Avtaars In Metaverse And Their Promotion: Case Study”, SJMBT, vol. 1, no. 1, pp. 28–36, Dec. 2023. DOI: <https://doi.org/10.36676/sjmbt.v1i1.04>
- M. Gupta, “Say No to Speculation in Crypto market during NFT trades: Technical and Financial Guidelines”, SJMBT, vol. 1, no. 1, pp. 37–42, Dec. 2023. DOI: <https://doi.org/10.36676/sjmbt.v1i1.05>
- A. Singla, M. Singla, and M. Gupta, “Unpacking the Impact of Bitcoin Halving on the Crypto Market: Benefits and Limitations”, SJMBT, vol. 1, no. 1, pp. 43–50, Dec. 2023. DOI: <https://doi.org/10.36676/sjmbt.v1i1.06>
- Gupta and P. Jain, “Expected Impact Of Decentralization Using Blockchain Based Technologies”, SJMBT, vol. 1, no. 1, pp. 51–56, Dec. 2023. DOI: <https://doi.org/10.36676/sjmbt.v1i1.07>
- D. Gupta and S. Gupta, “Exploring world famous NFT Scripts: A Global Discovery”, SJMBT, vol. 1, no. 1, pp. 63–71, Dec. 2023. DOI: <https://doi.org/10.36676/sjmbt.v1i1.09>
- M. Gupta, “Integration of IoT and Blockchain for user Authentication”, SJMBT, vol. 1, no. 1, pp. 72–84, Dec. 2023. DOI: <https://doi.org/10.36676/sjmbt.v1i1.10>
- A. Singla and M. Gupta, “Investigating Deep learning models for NFT classification : A Review”, SJMBT, vol. 1, no. 1, pp. 91–98, Dec. 2023. DOI: <https://doi.org/10.36676/sjmbt.v1i1.12>
- Issalh, R., Gupta, D., & Gupta, M. (2023). RESEARCHER ECONOMY: A REVOLUTION BY 9NFTMANIA FOR PRESENT ALPHA MALE. Scientific Journal of Metaverse and Blockchain Technologies, 1(1), 99–104. <https://doi.org/10.36676/sjmbt.v1i1.13>





- Gupta, D. (2024). The Role of Volunteers vs. Investors and Speculators in the Cryptocurrency Market: A Comparative Study of Reputation and Value Building. *Scientific Journal of Metaverse and Blockchain Technologies*, 2(Special), 18–26. <https://doi.org/10.36676/sjmbt.v2.iSpecial.50>
- Singla, A. (2024). Reviewing Limited Supply Crypto Projects: ULTIMA, COREDAOVIP. *Scientific Journal of Metaverse and Blockchain Technologies*, 2(2), 111–123. <https://doi.org/10.36676/sjmbt.v2.i2.41>
- Ashutosh, & Gupta, M. (2024). Investigating the Narrative of Trinity: 9NFTMANIA, Premium Domain, COREDAOVIP. *Scientific Journal of Metaverse and Blockchain Technologies*, 2(2), 124–137. <https://doi.org/10.36676/sjmbt.v2.i2.42>
- Ashutosh, & Gupta, M. (2024). Investigating the Narrative of Trinity: 9NFTMANIA, Premium Domain, COREDAOVIP. *Scientific Journal of Metaverse and Blockchain Technologies*, 2(2), 124–137. <https://doi.org/10.36676/sjmbt.v2.i2.42>
- Singla, A. (2024). Exploring Liquidity Pooling and Automated Trading with COREDAOVIP Token in Decentralized Exchanges. *Scientific Journal of Metaverse and Blockchain Technologies*, 2(2), 1–12. <https://doi.org/10.36676/sjmbt.v2.i2.26>
- Meenu. (2024). COREDAO.VIP: Crypto-Based Liquidity Pool Creation for Profit Maximization. *Scientific Journal of Metaverse and Blockchain Technologies*, 2(2), 150–156. <https://doi.org/10.36676/sjmbt.v2.i2.44>

