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Research paper



Cryptocurrency and Venture Capital: A Systematic Review of Blockchain-Based Funding Mechanisms for Startups

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Abstract

This Systematic Literature Review (SLR) analyzes 38 empirical studies published between 2015 and 2025 (sourced from Scopus and Sci-ScienceDirect) to map blockchain-based funding mechanisms in the context of venture capital (VC) and entrepreneurial finance. The review addresses four research questions concerning the evolution of these mechanisms, their impact on startup performance, and associated risks and regulatory challenges. The findings establish a robust taxonomy of mechanisms, including Initial Coin Offerings (ICOs), Security Token Offerings (STOs), and Decentralized Autonomous Organizations (DAOs), each presenting unique features and regulatory profiles. Crucially, the review highlights significant gaps in long-term performance data, revealing challenges related to investor protection, fraud risk, and regulatory uncertainty. By integrating Signaling Theory and Governance Theory, the study discusses how tokenomics and team credibility function as signals instead of traditional VC due diligence, presenting a critical comparison between token-based funding and traditional-al venture capital financing. This paper offers valuable insights for academics, policymakers, and industry practitioners by providing a com-comprehensive map of the field, suggesting avenues for future empirical research, and offering focused policy implications regarding regulation and investor safety in emerging markets.

Keywords: *Entrepreneurial Finance; Cryptocurrency; Blockchain; Venture Capital; Startup Financing; ICO; STO; Tokenization; DAO; Blockchain Crowd-funding.*

1. Introduction

The landscape of entrepreneurial finance has undergone a profound transformation with the emergence of blockchain technology and cryptocurrencies. (Ahluwalia et al., 2020, Bogusz et al., 2020). Traditionally, venture capital (VC) has been the dominant financing mechanism for startups, particularly in high-growth and high-risk industries. (Kumar Salla & V Krishna Reddy, 2022). However, the rapid development of Initial Coin Offerings (ICOs), Security Token Offerings (STOs), tokenization models, and other blockchain-based fundraising mechanisms has created a parallel ecosystem of startup financing that challenges conventional VC logics. (Risius et al., 2023). These developments raise fundamental questions about the role of venture capital in an era where startups may bypass traditional intermediaries and directly access global pools of investors through decentralized platforms. (Shi et al., 2024).

While existing literature on venture capital has extensively explored investment decision-making, performance outcomes, and exit strategies, research on the intersection between cryptocurrency-based financing and entrepreneurial finance remains fragmented. (Chod & Lyandres, 2018). Studies on ICOs and STOs often emerge from computer science, law, or economics, focusing narrowly on technical, regulatory, or pricing aspects, rather than positioning these mechanisms within the broader domain of venture capital and entrepreneurial finance. (Joshipura et al., 2025). As a result, the academic discourse has not fully captured how blockchain-based funding reshapes the entrepreneurial finance ecosystem, alters investor–entrepreneur relationships, and influences startup growth trajectories. (Robusti et al., 2025, Bogusz et al., 2020).

This article addresses that gap by systematically reviewing the body of research on cryptocurrency and blockchain-based funding mechanisms in the context of venture capital and entrepreneurial finance. Using a PRISMA-guided systematic review of 2015–2025 publications, this study identifies, synthesizes, and categorizes how cryptocurrency-enabled mechanisms such as ICOs, STOs, tokenization, and crypto-based crowdfunding contribute to or disrupt existing venture capital practices.

Building on this observation, it becomes clear that prior studies on cryptocurrency within the context of venture capital remain scattered and disciplinary in nature. Most contributions either emphasize the technological side of blockchain or the financial side of entrepreneurial finance, but rarely integrate both perspectives. This reinforces the need for a systematic review that bridges these two domains and develops a more holistic understanding of how blockchain-driven financing mechanisms transform entrepreneurial finance.

The contribution of this review is threefold. First, it extends the literature on entrepreneurial finance by framing blockchain-based funding as an emerging form of venture capital rather than a separate fintech phenomenon. Second, it integrates insights across disciplines to

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develop a taxonomy of blockchain-driven financing mechanisms, highlighting their implications for investor decision-making, governance structures, and startup growth. Third, it provides practical insights for venture capitalists, startup founders, and policymakers by contrasting opportunities and risks associated with cryptocurrency-based financing against conventional VC models.

Research Questions

To structure this systematic review and ensure alignment with both the identified research gaps and the journal's scope, the following research questions are proposed:

1) How have cryptocurrencies and blockchain-based mechanisms (e.g., ICOs, STOs, tokenization, crypto-based crowdfunding) been conceptualized and applied within the field of entrepreneurial finance?
2) In what ways do these mechanisms complement, compete with, or disrupt traditional venture capital practices?
3) What are the key challenges, risks, and regulatory issues associated with cryptocurrency-based startup financing?
4) What implications do these findings hold for venture capitalists, startup founders, and policymakers in both advanced and emerging markets?

2. Methodology

2.1 Search strategy

The search was performed using Elsevier databases (Scopus and ScienceDirect). The Boolean search string was: ("blockchain" OR "cryptocurrency" OR "token" OR "tokenization" OR "ICO" OR "STO") AND ("venture capital" OR "startup financing" OR "entrepreneurial finance")

Filters applied:

- Years: 2015–2025
- Language: English
- Publication type: Empirical research articles
- Subject areas: Business, Economics, Finance, Entrepreneurship

This search yielded 254 articles. After removing 17 inaccessible full texts, 237 articles remained.

2.2. Screening and eligibility criteria

Screening followed a two-stage process:

- Q1 — Relevance to entrepreneurial finance/VC context
- Included: studies where blockchain mechanisms are analyzed as financing models.
- Excluded: studies applying blockchain to supply chain, healthcare, logistics, art, or non-financial topics.
- Q2 — Empirical evidence
- Included: quantitative/qualitative/mixed-method studies with data-based findings.
- Excluded: reviews, bibliometric surveys, and purely conceptual papers.

A reproducible screening checklist was used:

1) Topic relevance
2) Startup financing connection
3) Empirical methodology
4) Availability of full text

After screening, 38 empirical studies were retained.

2.3. Data extraction and analysis

Data extraction was conducted along several dimensions, including:

- Bibliographic information (authors, year, journal).
- Research design and methodology.
- Funding mechanisms studied (ICO, STO, tokenization, DAO, blockchain crowdfunding).
- Main findings reported.
- Startup performance implications (growth, valuation, sustainability, exit outcomes).
- Challenges and regulatory aspects (risks, governance, jurisdictional issues).
- Comparisons with conventional venture capital (investment decision-making, post-investment relationship, exit strategies).

These dimensions provided a structured coding framework for synthesizing the literature. The extracted data were compiled into an analytical matrix and analyzed through:

1) Descriptive analysis (e.g., distribution by year, method, mechanism, geography).
2) Thematic synthesis, identifying recurring themes, knowledge gaps, and emerging research directions.

The PRISMA flow diagram (Figure 1) (Haddaway et al., 2022) Summarizes the article selection process, from 254 initial results, to 237 accessible articles, to 38 final studies included in this review.

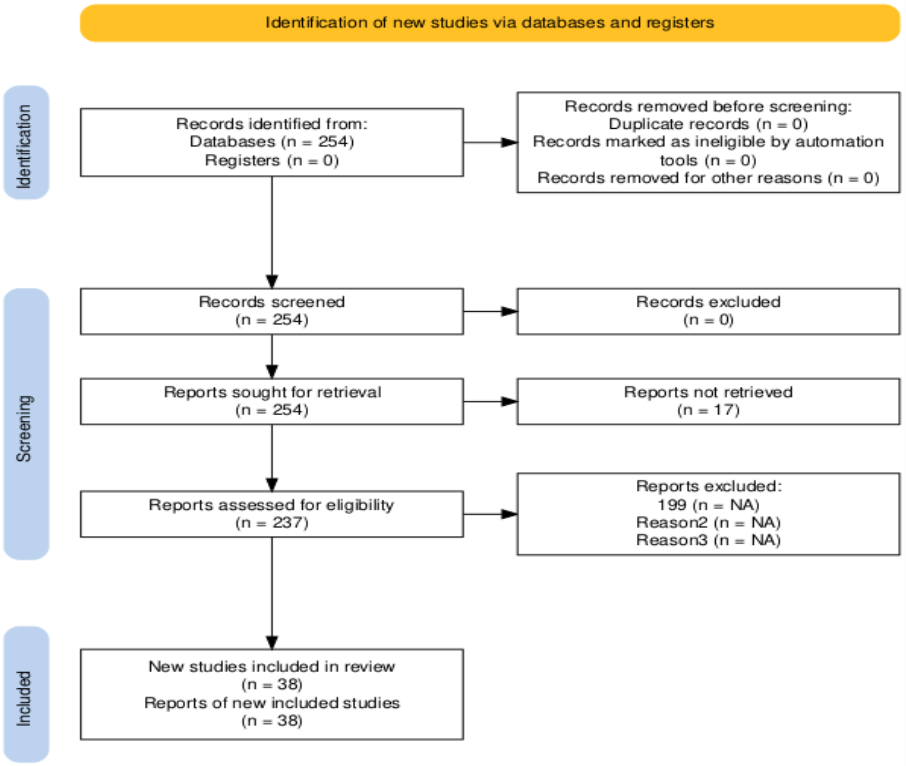


Fig. 1: The PRISMA Flow Diagram of Cryptocurrency and Venture Capital: A Systematic Review of Blockchain-Based Funding Mechanisms for Startups.

During the screening process, the author observed that many articles were thematically relevant but did not meet methodological standards, such as lacking empirical validation or being purely conceptual. These had to be excluded to ensure rigor, although they still reflect the breadth of interest in this domain.

3. Results

3.1. RQ1

What blockchain-based funding mechanisms have been applied to startup financing, and how have they evolved between 2015 and 2025?
The review identified a range of blockchain-based funding mechanisms employed in startup financing. The most prominent mechanism was the Initial Coin Offering (ICO), examined in 35 of the 38 studies, particularly during the peak period of 2017–2018. Other mechanisms included blockchain-based crowdfunding (10 studies), tokenization (8 studies), Security Token Offerings (STOs) (4 studies), Decentralized Autonomous Organizations (DAOs) (2 studies), and emerging forms such as airdrops (1 study).
From a temporal perspective, research activity began around 2016, reached a peak in 2021, and continued through 2024, reflecting both the initial hype and subsequent evolution of blockchain financing models. While ICOs dominate the literature, the gradual shift towards STOs and tokenization indicates a move toward more regulated and asset-backed models of financing.

3.2. RQ2

What are the implications of cryptocurrency-based funding mechanisms for startup performance and growth?
Out of the 38 included articles, 23 explicitly examined startup performance outcomes. Findings suggest mixed results:

- Some studies reported positive impacts, such as enhanced access to global capital, increased valuation, and accelerated growth trajectories.
- Others highlighted negative or uncertain effects, including unsustainable growth, volatility in token markets, and limited evidence of long-term success.
- Post-funding performance, including survival rates and exit strategies, remains underexplored, with most evidence focused on short-term fundraising success and token market behavior.

Overall, while blockchain-based mechanisms provide startups with unprecedented access to financing, the empirical evidence on their contribution to sustainable growth and long-term competitiveness remains inconclusive.

3.3. RQ3

What are the key challenges, risks, and regulatory issues associated with blockchain-based startup financing?
All 38 studies addressed challenges and risks, with regulation and compliance being the most prominent theme. Subthemes included:

- Securities law and regulatory compliance (≈30 studies), especially regarding ICOs and STOs under frameworks such as the U.S. SEC or the EU's MiFID.
- Fraud and market abuse (6 studies), including scams, pump-and-dump schemes, and a lack of investor protection.
- Governance and investor protection (3 studies), particularly in relation to DAOs and token-holder rights.
- AML/KYC requirements (1 study), highlighting gaps in anti-money laundering safeguards.

- General regulatory uncertainty (5 studies), where fragmented global jurisdictions created uncertainty for both investors and startups.

These findings underscore that regulatory fragmentation and weak investor protection mechanisms remain major obstacles to the legitimacy and scalability of blockchain-based financing.

3.4. RQ4

How do blockchain-based funding mechanisms compare with conventional venture capital?
Only 12 of the 38 studies explicitly compared blockchain-based mechanisms with traditional VC. The findings highlight both contrasts and complementarities:

- Investment decision-making: Blockchain-based models often lack the rigorous due diligence of VC investors, leading to higher information asymmetry and risk.
- Post-investment relationships: Traditional VCs provide mentoring, governance, and strategic support, whereas blockchain-based mechanisms typically involve arms-length relationships, mediated through token markets.
- Exit strategies: While VC-backed startups pursue structured exit routes (IPO, acquisition), blockchain-funded startups rely more on token liquidity in secondary markets as a quasi-exit mechanism.

These differences highlight that blockchain-based funding does not fully replace VC but rather operates as a parallel mechanism. A potential future direction lies in hybrid models, where startups combine traditional VC investment with token-based financing to access both capital and strategic support.
Summary of Results

- RQ1: ICOs dominate, but STOs and tokenization are emerging as regulated alternatives.
- RQ2: Evidence of positive fundraising impact, but long-term performance remains unclear.
- RQ3: Regulatory compliance and fraud are the most critical challenges.
- RQ4: Blockchain financing differs fundamentally from VC in due diligence, investor relationships, and exit mechanisms, yet hybrid models may offer complementarity.

Interestingly, the majority of reviewed articles originated from European contexts, whereas research from Asia remained limited despite the region's dynamic adoption of cryptocurrencies. This geographic imbalance highlights the need for more diverse empirical studies that reflect the global nature of blockchain-based financing.

4. Discussion

This section synthesizes insights from the 38 empirical studies and explains how blockchain-based financing mechanisms intersect with the concepts of venture capital, entrepreneurial finance, and governance. The discussion is structured according to the four research questions.

4.1. RQ1: evolution of mechanisms and differentiation

The dominance of ICOs during 2017–2018 can be attributed to minimal regulatory oversight and low barriers to market entry. As regulatory scrutiny increased, token offerings evolved into more structured models such as STOs and asset-backed tokenization. This transition reflects a broader institutional shift, where blockchain-based financing increasingly seeks legitimacy and the attention of sophisticated investors.
The emergence of DAOs illustrates a shift toward decentralized governance, yet these structures remain legally unrecognized in many jurisdictions, limiting their scalability. Blockchain-based crowdfunding highlights inclusivity and financial democratization, although it does not eliminate governance challenges. Collectively, the evolution of mechanisms suggests increasing alignment with traditional financial principles but without replacing them.

Table 1: Taxonomy of Blockchain-Based Startup Funding Mechanisms

Mechanism	Key Characteristics	Role for Startups	Regulatory Profile	Representative Studies
ICO	Public token sale; rapid fundraising; whitepaper-based disclosure	Fast access to capital; suitable for early-stage ventures	Low regulation; high fraud risk	Benedetti & Kostovetsky (2021)
STO	Tokens classified as securities; asset/equity backed	Attracts institutional investors; bridges crypto and VC	High compliance (SEC, MiFID)	Studies 2020–2022
Tokenization	Fractional ownership of assets	Monetize illiquid assets; improve liquidity	Varies by jurisdiction	Studies 2021–2024
DAO	Community governance with token-holder voting	Decentralized decision-making and financing	Unclear legal recognition	Wang et al. (2019)
Blockchain-based Crowdfunding	Crowdfunding via blockchain infrastructure	Inclusive financing; democratized participation	Medium regulation	Studies 2021–2023
Hybrid/Other	Airdrops, VC+token models	Combines liquidity with strategic support	Still evolving	Emerging studies 2022–2024

4.2. RQ2: impacts on startup performance

Empirical evidence on performance outcomes remains mixed. While studies indicate that ICOs improve early valuations and enable fast access to global capital, these advantages are often short-lived due to insufficient governance monitoring and weak post-investment support structures. The absence of structured exits means that token liquidity functions as a quasi-exit but does not substitute for strategic pathways such as IPOs or M&A.
Token design variables—including lock-up periods, vesting schedules, and token-holder voting rights—appear to moderate performance impacts, although empirical evidence remains fragmented. The literature still lacks longitudinal analysis on survival rates and sustainability, confirming that blockchain financing remains largely opportunistic rather than strategically developmental.

Table 2: Implications of Blockchain-Based Funding on Startup Performance

Dimension	Positive Evidence	Negative/Unclear Evidence
Access to Capital	Global reach; rapid fundraising	Reliant on hype cycles
Valuation	Higher initial valuations	Overvaluation; volatility risks
Growth Trajectory	Rapid scaling via community participation	Unsustainable growth; weak fundamentals
Exit/Survival	Token liquidity as quasi-exit	Few structured exits; high failure rate

4.3. RQ3: regulatory challenges and investor protection

Regulatory heterogeneity remains the most pervasive theme across empirical studies. STOs require securities compliance, ICOs face ambiguity under securities law, and DAOs operate in a legal vacuum. Fragmentation increases risks of opportunism, fraud, and pump-and-dump manipulation, reducing investor confidence and limiting participation from institutional investors.

The empirical evidence from Southeast Asia reinforces that regulatory gaps are especially pronounced in emerging markets where compliance frameworks and AML/KYC enforcement vary significantly (Zhang et al., 2024). These findings emphasize the need for harmonized disclosure standards and proportionate compliance regimes.

Table 3: Key Challenges and Regulatory Themes

Theme	Frequency	Key Insights
Regulatory Compliance	≈30	ICO/STO face securities law scrutiny; fragmented jurisdictions
Fraud & Market Abuse	6	Scams, pump-and-dump schemes
Governance & Investor Protection	3	DAO accountability issues
AML/KYC Gaps	1	Weak anti-money laundering safeguards
Regulatory Uncertainty	5	Cross-border fragmentation deters investors

4.4. RQ4: blockchain vs venture capital: complementarity

Only a fraction of studies directly compare blockchain-based financing with venture capital, yet important patterns emerge. Venture capitalists add value through due diligence, staged financing, monitoring, knowledge transfer, and post-investment governance—capabilities that token-based mechanisms do not replicate. Blockchain models distribute risk and capital through dispersed investors, but they do not provide structured oversight or mentoring.

Token liquidity enables dynamic pricing and flexible participation, but liquidity alone does not generate strategic guidance. Thus, blockchain financing does not replace venture capital; rather, it complements it. Evidence from India shows hybrid token–equity models where VC oversight coexists with token liquidity (Singh & Chandra, 2024). This complementarity suggests a future trajectory toward collaborative, rather than substitutive, financing models.

Table 4: Blockchain-Based Funding vs. Traditional VC

Dimension	Blockchain-Based Mechanisms	Traditional VC
Due Diligence	Minimal; signaling via whitepapers/tokenomics	Rigorous; detailed screening
Post-Investment Support	Arms-length; limited mentoring	Active mentoring, governance, networks
Exit Strategies	Token liquidity as quasi-exit	IPO, M&A, structured exit
Investor Relations	Dispersed, anonymous investors	Concentrated, relational investors
Value-Add	Community engagement; liquidity	Strategic expertise; governance

4.5. Theoretical implications

This systematic review provides theoretical contributions by situating blockchain-based startup financing within three established theoretical domains of entrepreneurial finance.

First, from the perspective of signaling theory, blockchain-based fundraising introduces novel forms of signals that differ from traditional venture capital. In conventional VC settings, entrepreneurs rely on business plans, patents, or prior entrepreneurial track records as quality signals. (Colombo, 2020, Yang et al., 2023). By contrast, in ICOs or STOs, credibility is signaled through tokenomics design, smart contract transparency, and the reputation of the development team. (Zhang et al., 2021). These unconventional signals highlight both opportunities (rapid and global signaling to investors) and challenges (higher risks of misrepresentation and weak due diligence compared to VC screening) (Guo, 2024).

Second, financial intermediation theory is extended by demonstrating how blockchain technology enables disintermediation in entrepreneurial finance. Whereas venture capitalists traditionally act as intermediaries who pool funds, evaluate opportunities, and monitor portfolio firms, blockchain-based financing bypasses these roles by directly connecting entrepreneurs with a dispersed global investor base. (Guo, 2024, Robusti et al., 2025). This shift challenges the conventional value-adding role of VCs but simultaneously underscores the potential for hybrid models, where token-based fundraising complements rather than substitutes for venture capital intermediation.

Third, governance theory is enriched by contrasting post-investment monitoring under blockchain-based versus VC financing. Venture capitalists provide active governance through board representation, mentoring, and staged financing, while blockchain-based mechanisms rely on decentralized governance models such as token-holder voting or DAOs (Pelt et al., 2020, Pechlivanidis, 2024). However, these decentralized forms of governance remain fragile due to legal uncertainties and collective action problems. A promising avenue lies in hybrid governance models, where startups integrate token-based community participation with the strategic oversight and mentoring offered by traditional VCs.

Collectively, these theoretical insights demonstrate that blockchain-enabled startup financing should not be interpreted as a disruptive substitute for venture capital but rather as an extension that reshapes signaling, intermediation, and governance in entrepreneurial finance. By integrating these perspectives, this review advances the scholarly understanding of how new technological mechanisms intersect with and potentially transform established theories in venture capital research.

Practical and Policy Implications

Startups should match mechanisms to strategy ICOs for rapid community-driven growth, STOs for institutional credibility, and hybrids for capital plus governance. Investors require on-chain due diligence tools. Policymakers must harmonize regulation, design disclosure standards, and develop proportionate compliance regimes.

These findings resonate with tendencies the author has also observed in practice: traditional investors remain cautious about integrating blockchain mechanisms into early-stage financing. This suggests that, beyond theoretical considerations, cultural and institutional factors play a role in shaping adoption trajectories.

Future Research Agenda

In addition to synthesizing the current state of research, this review highlights several avenues for future investigation. Table 5 summarizes key research gaps and proposes directions for further study. First, most empirical studies focus on short-term fundraising outcomes, leaving startup survival, growth trajectories, and structured exit strategies underexplored. Longitudinal analyses are therefore necessary to assess the long-term sustainability of blockchain-financed startups. Second, regulatory uncertainty remains a recurring issue, with the majority of existing studies concentrated in European contexts. Comparative analyses across diverse jurisdictions, particularly in Asia and other emerging markets, would provide valuable insights into how institutional environments shape adoption.

Third, hybrid models that combine blockchain-based liquidity with the governance and mentoring functions of traditional venture capital have only been conceptually discussed but lack empirical testing. Future research should investigate such models through case studies and surveys to evaluate their feasibility and effectiveness. Fourth, decentralized governance mechanisms, such as DAOs, remain theoretically promising but empirically underexamined. More rigorous studies are required to assess their decision-making efficiency, investor protection, and legal recognition.

Fifth, signaling mechanisms in token-based finance, such as whitepaper quality, tokenomics design, and developer reputation, require systematic testing to refine signaling theory in this emerging domain. Finally, investor behavior in cryptocurrency financing remains insufficiently understood, particularly in relation to due diligence practices. Future research could examine how on-chain analytics and verification tools can mitigate information asymmetry and fraud risks. Collectively, these research directions extend the theoretical and practical frontiers of entrepreneurial finance and provide a robust agenda for scholars in this rapidly evolving field.

Table 5: Future Research Agenda

Theme / Gap Identified	Future Research Direction	Rationale / Contribution
Startup performance outcomes: Most studies assess only short-term fundraising	Conduct longitudinal studies on survival rates, exit strategies, and long-term growth trajectories of blockchain-financed startups.	Provides robust empirical evidence on the sustainability of blockchain-based financing models
Regulatory uncertainty: fragmented across jurisdictions, with a focus on Europe	Undertake cross-jurisdictional comparative analyses, including Asia and emerging markets.	Offers global insights and supports the design of harmonized regulatory frameworks
Hybrid models (VC + blockchain): conceptually discussed but rarely tested	Conduct empirical investigations of hybrid financing models (VC governance + token liquidity) through case studies and surveys	Explains how venture capital and blockchain financing can complement each other in practice
DAO governance effectiveness: limited evidence, legal and coordination challenges	Carry out empirical assessments of DAO decision-making, accountability, and investor protection.	Expands governance theory in the context of decentralized entrepreneurial finance
Signaling mechanisms in token-based finance: underexplored	Analyze whitepaper quality, tokenomics design, and developer reputation as quality signals.	Extends signaling theory to blockchain-based startup financing
Investor behavior and due diligence: Crypto investors are often anonymous and speculative	Study on-chain due diligence practices and verification tools adopted by investors	Addresses literature gaps on investor behavior and mitigates risks of asymmetric information

4.6. Limitations

This review is subject to several limitations that should be acknowledged. First, the database coverage was restricted to Elsevier platforms (Scopus and ScienceDirect). Although these databases are among the most comprehensive in management and finance, the exclusion of other sources such as Web of Science, IEEE, or SSRN may have led to the omission of relevant studies. Second, the review focused exclusively on English-language publications, which may have excluded important contributions from non-English contexts, particularly in regions such as Asia or Latin America, where blockchain adoption is highly dynamic.

Third, the heterogeneity of study designs, ranging from quantitative surveys to qualitative case studies, limited the possibility of conducting a formal meta-analysis. Instead, the synthesis relied on thematic integration, which, while suitable for mapping diverse evidence, does not allow for precise measurement of effect sizes. Fourth, the temporal scope of 2015–2025 means that the most recent regulatory and technological developments may not yet be reflected, a noteworthy limitation in a fast-evolving field such as cryptocurrency finance. Finally, the decision to include only empirical studies excluded conceptual and theoretical contributions that could have provided broader interpretive frameworks.

While these limitations inevitably constrain the generalizability of the findings, they also open promising avenues for future research. Expanding database coverage, integrating non-English studies, adopting mixed-method synthesis, and combining empirical with conceptual contributions would enhance the comprehensiveness of subsequent reviews. In particular, longitudinal studies on startup survival, comparative regulatory analyses across jurisdictions, and empirical tests of hybrid financing models emerge as critical directions to advance scholarship in this domain.

5. Conclusion

This study has systematically reviewed the emerging literature on blockchain-based startup financing in the context of venture capital and entrepreneurial finance. By analyzing 38 empirical studies published between 2015 and 2025, the review provides a comprehensive synthesis that addresses four guiding research questions. The results reveal a taxonomy of blockchain-enabled mechanisms, including ICOs, STOs, tokenization, DAOs, and blockchain-based crowdfunding, highlighting their distinct characteristics, regulatory profiles, and potential roles in startup financing. While ICOs dominate both practice and research, more recent developments such as STOs and tokenization illustrate a gradual move toward regulatory compliance and institutional legitimacy.

The findings also demonstrate mixed implications for startup performance. On one hand, blockchain-based mechanisms can democratize access to capital, accelerate fundraising, and enhance early valuations. On the other hand, they often lack the governance, mentoring, and structured exit pathways typical of venture capital, resulting in sustainability challenges and high volatility. Challenges surrounding regulatory compliance, fraud, and investor protection remain critical, underscoring the need for harmonized global frameworks. Comparative insights suggest that blockchain-based funding mechanisms should not be seen as substitutes for traditional VC, but rather as

complementary instruments. Hybrid models, which combine token-based liquidity with the strategic and governance support of VC, may represent the most promising path forward.

The contribution of this review is threefold. Theoretically, it extends entrepreneurial finance scholarship by integrating cryptocurrency-driven mechanisms into the VC ecosystem and proposing a taxonomy that maps their roles. Practically, it offers insights for founders and investors in matching financing mechanisms to strategic objectives, while also providing policymakers with guidance on disclosure standards, compliance design, and cross-jurisdictional coordination. Importantly, this review emphasizes that the future of entrepreneurial finance may rest on hybrid models that balance blockchain's programmability and global reach with VC's expertise and governance.

Like any study, this review has limitations. It draws only from Elsevier databases and English-language sources, potentially excluding relevant studies elsewhere. The heterogeneity of study designs limits quantitative synthesis, and the review period (2015–2025) may not capture the very latest developments in regulation and practice. Nevertheless, by consolidating and systematizing current knowledge, this review lays a foundation for future research. Promising avenues include longitudinal studies of startup survival, causal analyses of regulatory reforms, empirical assessments of hybrid financing models, and deeper exploration of DAO governance effectiveness.

In conclusion, blockchain-based funding mechanisms are reshaping entrepreneurial finance, not by displacing venture capital, but by expanding its frontier. The convergence of crypto-based and conventional financing approaches offers an unprecedented opportunity to design more inclusive, innovative, and accountable funding ecosystems for the next generation of startups.

This review aspires to serve as a reference point for both researchers and practitioners seeking to understand the paradigm shift in startup financing. At the same time, the author acknowledges the limitations of this study, particularly the restricted access to empirical data from crypto projects in emerging markets. Addressing these gaps could strengthen the theoretical and practical insights for future work.

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