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Cryptocurrency, Blockchain, and Investment Avenues in India: A Bibliometric Analysis

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Abstract

This study maps the Scopus-indexed literature on cryptocurrency, blockchain, and investment avenues in India through a bibliometric analysis of 879 documents retrieved on 22 September 2026. Performance analysis and four VOS viewer science-mapping techniques, co-authorship, keyword co-occurrence, bibliographic coupling, and co-citation analysis, are used to address five research questions covering publication trends, influential contributors, influential documents, thematic structure, and future research directions. Annual output rose from two documents in 2008 to a peak of 187 in 2025, with more than 85 percent of the dataset published between 2019 and 2024, and research is dispersed across 623 sources, with India-affiliated authors on 84.1 percent of documents and international co-authorship on only 13.2 percent. Keyword co-occurrence and co-citation analysis independently identify a cryptocurrency-investment strand that is thematically and intellectually distinct from, and loosely connected to, the much larger blockchain-technology literature, which is dominated by supply-chain, security, and smart-contract applications. The results indicate a young, rapidly growing, and internally differentiated field in which empirical research on cryptocurrency as an investment avenue for Indian investors remains comparatively thin, and in which Indian legal and regulatory literature remains fragmented and largely descriptive.

Keywords: Cryptocurrency, Blockchain; Investment Avenue, Bibliometric analysis, VOSviewer

1. Introduction

1.1 Background

Cryptocurrencies originated with the Bitcoin white paper in 2008 and the subsequent launch of its network in 2009 (Nakamoto, 2008). Ethereum later introduced programmable smart contracts, leading to the emergence of thousands of tokens, stablecoins and decentralised finance applications. The blockchain infrastructure underpinning these assets has transcended finance, finding applications in supply chains, healthcare, agriculture, education and public administration. A few studies have also focused on the integration of blockchain with automation in finance and business (Budania et al., 2023). As this technology developed, also did its financial applications. The approval of spot Bitcoin ETFs (exchange traded funds) by US government in January 2024 signalled increasing institutional acceptance, while the decline of TerraUSD, Luna and the FTX exchange in 2022 shows significant risk to investors. As a result, investors and researchers have doubt whether Cryptocurrency as an asset can diversify portfolios, hedge against risk or serve as safe heavens or if they are only a speculative instrument. Cryptocurrency prices as susceptible to sentiments, government regulations and global shocks like COVID-19 and thus, highly volatile. Further, cryptocurrency as an asset raise concerns about financial stability, investor's protection, fraud and market efficiency.

1.2 The Indian Context

In terms of these situations, India presents a unique context. It has largest youthful retail investor base, rapidly expanding digital finance and fintech sectors and one of the global leaders in user bases for cryptocurrencies. Nevertheless, the regulatory environment has remained uncertain. The Reserve Bank of India puts a ban on banks

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from serving cryptocurrency businesses in 2018, which was letter overturned by the Supreme Court of India in 2020. Eventual after, income from virtual assets has been taxed at a flat 30% rate with tax deducted at source and RBI also put to the test a central bank digital currency (CBDC). Garvita et al. (2022) defended for regulating cryptocurrency instead of banning it, side by side preparing for a digital rupee. Garvita et al. (2021) analyses the feasibility of CBDC, considering challenges like as bank disintermediation and technology readiness. Cryptocurrency now competes with traditional investment options, such as gold, real estate, fixed deposit, equity and mutual funds, for Indian households. Therefore, it is important to know how Researchers has studied these topics, which is valuable for investors, regulators, and academicians.

1.3 The Research Landscape and the Problem

Studies on Cryptocurrency, Blockchain and investment has rapidly expanded, though inconsistently. The dataset of 879, India related documents, between the years 2008 to 2026 , from Scopus database, reveals a significant rise in yearly output. It increased from 30 documents in 2019 to 187 documents in 2025. No matter how the composition of this output is very crucial. A substantial section focuses on Blockchain applications, including supply chain, agriculture, and security, with the most cited documents falling within this area. Compared to, research on cryptocurrency as an investment assets constitutes a smaller section and cited significantly less. Moreover, the literature is spread across various outlets, as conference proceedings (313) and book chapters (188) comprising a considerable portion compared to journal articles (306).

This distribution presents challenges in answering the basic questions like which theme dominate the field? Or which authors and countries are leading it? Or How strongly does the investment section connect to the broader Blockchain literature? Existing bibliometric and review studies tend to focus on blockchain in general (Nasir et al., 2021), blockchain in finance (Jaiswal et al., 2022) or specific sectors such as logistics (Rejeb et al., 2021). Notably, no prior study has comprehensively mapped cryptocurrency, blockchain and investment avenues within the Indian context.

1.4 Bibliometric Analysis Approach

Bibliometric analysis employs quantitative techniques on bibliographic data to outline publication trends, identify key contributors and uncover the intellectual and thematic framework of a discipline (Donthu et al., 2021). Unlike a conventional review, it can process extensive literature with minimal subjective bias. There are two main types of techniques: performance analysis evaluates the productivity and influence of authors, sources, institutions and countries. Science mapping illustrates relationships through co-authorship, keyword co-occurrence and bibliographic coupling. These maps are generated using VOSviewer (Van Eck & Waltman, 2010) with data sourced from Scopus, which provides comprehensive coverage of peer-reviewed literature and well-organised records.

1.5 Aim, Research Questions and Contributions

The objective of this biometric analysis is to create a map of Scopus index literature on crypto currency, block Jain and investment opportunities in India, showing how the investment aspect integrates into the broader Blockchain domain. The analysis includes five research questions:

- Question 1: What is the trend of volume of publication overtime?
- Question 2: Which authors, sources and countries are the most influential, including international collaborators?
- Question 3: Which documents have significantly influenced the field?
- Question 4: Which thematic clusters are identified, and how does the investment in cryptocurrency relate to the broader blockchain literature?
- Question 5: What research gap and future direction emerge?

This study contributes in three ways. First, it presents a structured map of scattered, India-centric literature. Second, it separates the technology and investment aspect, highlighting where the research focus and impact lie

the most. Third, it identifies gaps, such as limited coverage of investor behaviour and regulation, which can guide future research and inform investors and policymakers.

2. Literature Review

2.1 Cryptocurrencies as an Asset Class

Bitcoin was first launched as a peer to peer electronic cash transaction system (Nakamoto, 2008), but the early research raised concerns about its role as either currency or a speculative digital asset (Baek and Elbeck, 2015). Afterwards, researchers examine the market efficiency, price volatility, and investor focus (Urquhart, 2016; Kristoufek, 2013). Corbet et al. (2019) give a well-known summary of crypto currencies as financial assets. In India, there has been conceptual discussion on whether cryptocurrency should be classified as a currency or an asset, with Garvita et al. (2021) suggesting that its price fluctuations and restricted use in transactions align it more closely with a digital asset than a currency.

2.2 Diversification, Hedge, and Safe-Haven Roles

Whether cryptocurrency can protect a portfolio during difficult market conditions remains a central concern. Research in this area draws on the distinctions between hedging and safe- haven behaviour developed in studies of gold (Baur & Lucey, 2010). Within the dataset, Stensås et al. (2019) use a GARCH-DCC model to examine Bitcoin alongside developed and developing markets and commodities. They report that Bitcoin acts as a hedge in most of the developing countries studied, including India, but mainly as a diversifier in developed markets. Shahzad et al. (2022) then compares Bitcoin, gold, and VIX futures as hedges for BRICS countries's stock markets. Their findings suggest that Bitcoin and gold provide only weak hedging benefits and that these roles vary over time, including during COVID-19. Thus the studies point to market and time period specific results rather than a uniform investment role for Bitcoin.

2.3 Connectedness and Volatility Spillovers

Researchers studies how crypto markets transfer shocks to other assets. Dahir et al. (2020) use a TVP-VAR model to examine volatility connectedness between Bitcoin and equity markets in emerging economies. Kumar et al. (2023) apply the same family of methods to commodities, crypto, and G20 markets and find high connectedness during COVID-19 and the Russia-Ukraine crisis.

2.4 Financial Stability, Fraud, and Risk

Panigrahi (2023) finds that growth in crypto investment is associated with weaker financial stability in India, with only a marginal effect on economic growth. Boshmaf et al. (2020) analyze the MMM Ponzi scheme on Bitcoin, illustrating investor-protection risks.

2.5 Adoption, Awareness, and Investor Behavior in India

Indian studies often ask why people adopt cryptocurrency. Sharma et al. (2024) extend a technology adoption model to cryptocurrency adoption in India, and Singh et al. (2023) explore barriers to adoption. On the investment side, Murty et al. (2022) ask whether Bitcoin is a safe haven for Indian investors, using GARCH volatility analysis. Rijanto (2023) studies co-movements between an Asian technology stock index and cryptocurrencies during COVID-19.

2.6 Regulation, Law, and Policy

A specific set of Indian newspapers concentrates on issues related to law and policy. Nikam (2018) suggests a draft regulation model for cryptocurrency in India, while Kashyap et al. (2021) explore the incorporation of cryptocurrencies into India's legal and financial systems. Das (2024) examined digital currencies in sustainable finance and investment from an Indian perspective, while Singh and Rajni (2022) analysed about the future of Cryptocurrency in India. Many other descriptive studies outside the dataset reaches similar conclusions. Garvita et al. (2022) states that India should regulate Cryptocurrency in place of complete ban on it, while also developing its digital rupee and Garvita et al. (2021) examines the feasibility of the digital rupee, highlighting risks such as

declining demand in bank deposits, and widespread technology disparities across the country. These policy oriented papers have way fewer citation than Market based works, which points to their small impact so far.

2.7 Existing Bibliometric and Review Studies

Nasir et al. (2021) presented a bibliometric study of blockchain technologies and cryptocurrencies, while a scientometric perspective of Blockchain finance is presented by Jaiswal et al. (2022). Bibliometric review in specific fields are by Rejeb et al. (2021) which reviews the blockchain in logistics and supply chain, and the review of blockchain in agriculture by Yadav and Singh (2019).

2.8 Research Gap

This review reveals three gaps. First, the dominance of blockchain applications in literature and the investment focused crypto side is small and less cited. Second, Indian legal and behavioral studies are scattered across outlets, many of them conference proceedings or descriptive book chapters that rely on secondary data rather than bibliometric mapping. Third, no bibliometric study brings the cryptocurrency, blockchain, and investment strands together for India. This study addresses that gap.

3. Methodology

3.1 Research Design

This study uses a bibliometric research design, combining performance analysis and science mapping (Donthu et al., 2021). Performance analysis evaluates the productivity and influence of authors, sources, institutions, and countries by examining publication and citation statistics. Science mapping illustrates the intellectual and thematic framework of the field using co-authorship networks, keyword co-occurrence networks, and bibliographic coupling of documents. Both types of analysis are utilised on the entire collection of 879 retrieved documents.

3.2 Data Source

Bibliographic information was obtained from Scopus, selected for its extensive range of peer-reviewed journals, conference proceedings, and book chapters, as well as its organised export format suitable for bibliometric tools. The search took place on 22 September 2026 using the specified query across the title, abstract, and keyword fields:

TITLE-ABS-KEY("blockchain technology") OR TITLE-ABS-KEY("investment avenue") OR TITLE-ABS-KEY(bitcoin) OR TITLE-ABS-KEY(cryptocurrenc* OR "digital currenc*" OR "virtual currenc*" OR "digital asset*" OR cryptoasset*) AND TITLE-ABS-KEY(india)

The India condition was applied to the title, abstract, and keywords of the text, but not to the author affiliation. Therefore, the retrieved set contains documents about India authored by individuals from other locations, as well as those by authors affiliated with India.

3.3 Data Processing

The search yielded 879 documents, which were exported in Scopus's standard CSV format containing 45 fields, such as bibliographical details, abstracts, author and index keywords, and cited references. No duplicate Scopus EIDs or DOIs are included in the exported file. Two forward dated processings found at the extraction time, dated 2027 and 99 documents dated 2026 indicates an incomplete final year, are included only in the descriptive trend analysis and pointed in the results. Out of total 879 documents, 877 are in English and 2 are in Persian. Therefore, the two documents not in English are excluded from keyword based analysis but included in performance counts.

Document type	Count
Conference paper	313
Article	306
Book chapter	188

Document type	Count
Conference review	33
Review	21
Book	9
Erratum	4
Note	2
Letter	1
Editorial	1
Retracted	1
Total	879

3.4 Affiliation Country Coding

Country coding differentiated between Research associated with India and research by Indian authors. 84.1% or 739 documents of the data set have been recorded with at least one Indian author. The remaining 140 documents referenced India in the title, abstract or keywords, however, they did not mention any India affiliated author. Keeping this differentiation clear, prevents the mistake of treating all research related to India as the work of Indian institutions.

3.5 Analytical Tools

Science mapping was performed with VOSviewer (Van Eck & Waltman, 2010), which constructs and displays biometric network visualisation based on given Scopus export file. The following analyses were conducted on the complete data asset:

- Analysis of co-authorship, according to authors and countries, to identify active contributors and other collaboration patterns, including international collaborations.
- Analysis of keyword co-occurrence, using author keywords with a minimum occurrence threshold of 5, to identify thematic clusters.
- Analysis of bibliography coupling of documents, to identify clusters of documents that reference similar past literature.
- Analysis of citations, to identify the documents, authors and sources cited the most times.

Descriptive statistics was performed using python directly on the Scopus export file, to find Publication trends, document types, and country and source distributions.

3.6 Limitations of the Study

This analysis has several constraints. First, using the ‘OR’ format and a text best filter for India, the dataset become broader and less specific, than a query that requires both cryptocurrency and investment terms, and it may still include some documents that match only one of the terms. Second, the coverage is limited to Scopus and excludes Web of Science, Google Scholar and non-indexed regional journals, which may not represent all Indian outlets. Third, in bibliometric analysis, distinguishing between author name is a well known problem, especially for common Indian surnames, VOSviewer’s default option was used for author matching and no manual clarity was provided. Fourth, citation counts reflect the extraction date and will change over time, and recent publications (2024–2026) have had less time to accumulate citations, which affects comparisons of impact across years.

4. Results

4.1 Overview of the Science-Mapping Outputs

Five analyses are reported below, a descriptive performance analysis addressing publication trends, source distribution, and country-level output, followed by four VOSviewer network analyses addressing the co-authorship analysis, keyword co-occurrence analysis, bibliographic coupling of documents, and co-citation analysis. A fifth VOSviewer analysis, direct citation linkage among the 879 documents themselves, was also run but is not reported in detail, it returned only 5 links across the full set (874 of 879 documents forming singleton clusters), reflecting the well-known limitation that direct citation analysis only registers a link when one retrieved document cites another document also present in the same retrieved set, and is therefore uninformative for a sample of this breadth.

4.2 Performance Analysis: Publication Trends and Productivity

Year-on-Year publication increased from 2 documents in 2008 to a high of 187 in 2025 and 99 further documents were recorded in 2026, which reflects the data extraction date rather than a decline in Publication. Until the year 2018, the number of publications remain in one or low two digit numbers and thereafter grew continuously, resulting in 30 documents in 2019, 41 in 2020, 63 in 2021, 85 in 2022, 163 and 2023 and 182 in 2024.

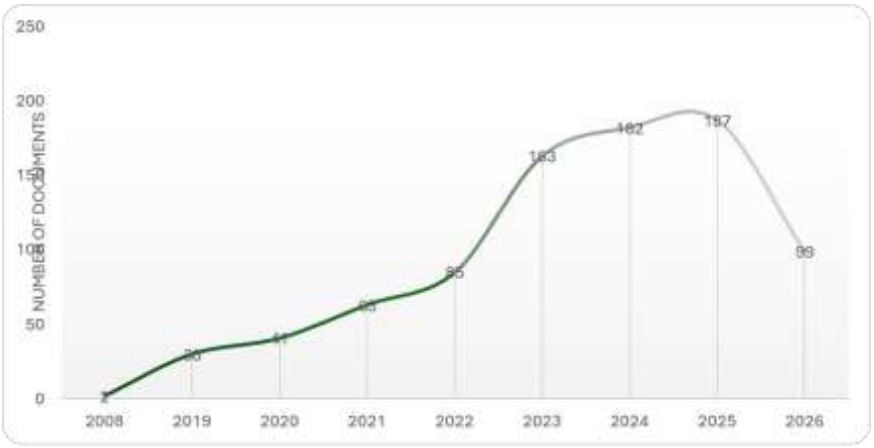


Figure 4.1: Annual Publication Output

This trend place the bulk of the literature, more than 85% of the total 879 documents within the six year range from 2019 to 2024. This indicates that studies on cryptocurrency, blockchain and investment opportunities in India have not yet matured, but they are developing very rapidly.

The dataset of 879 documents is received from 623 separate sources, indicating that they are published on a larger scale across many sources instead of a few specialised ones. The most frequent sources are Lecture Notes in Networks and Systems (49 documents), AIP Conference Proceedings (19), Lecture Notes in Electrical Engineering (13), Communications in Computer and Information Science (9), Smart Innovation, Systems and Technologies (8), ACM International Conference Proceeding Series (7), Studies in Systems, Decision and Control (6), Finance India (6), and Lecture Notes on Data Engineering and Communications Technologies (6). The predominance of conference proceedings series among the leading sources is consistent with the document-type distribution reported in Section 3.3, in which conference papers (313) and book chapters (188) together outnumber journal articles (306).

Of the 842 documents with available affiliation data, 739 (84.1%) list at least one author affiliation in India, consistent with the country-level screen reported in Section 3.4. The next most frequent countries by affiliation are the United States (44 documents), the United Kingdom (28), Australia (16), China (15), Saudi Arabia (13), Malaysia (11), and Indonesia (11). A total of 116 documents (13.2% of the full dataset) carry an India affiliation alongside at least one non-India affiliation, indicating a modest but non-trivial level of international co-authorship; the remaining 623 India-affiliated documents list Indian affiliations exclusively.

4.3 Co-authorship Analysis

Of 2,606 unique authors identified across the 879 documents, 151 met the default VOSviewer threshold of a minimum of two documents per author. The resulting co-authorship network comprises 151 items grouped into 74 clusters, connected by 116 links. Because many clusters are small and isolated, the entire set of 151 authors was kept in the visualisation rather than limiting the map to the largest connected component, so that smaller yet still qualifying collaboration groups also remain visible.

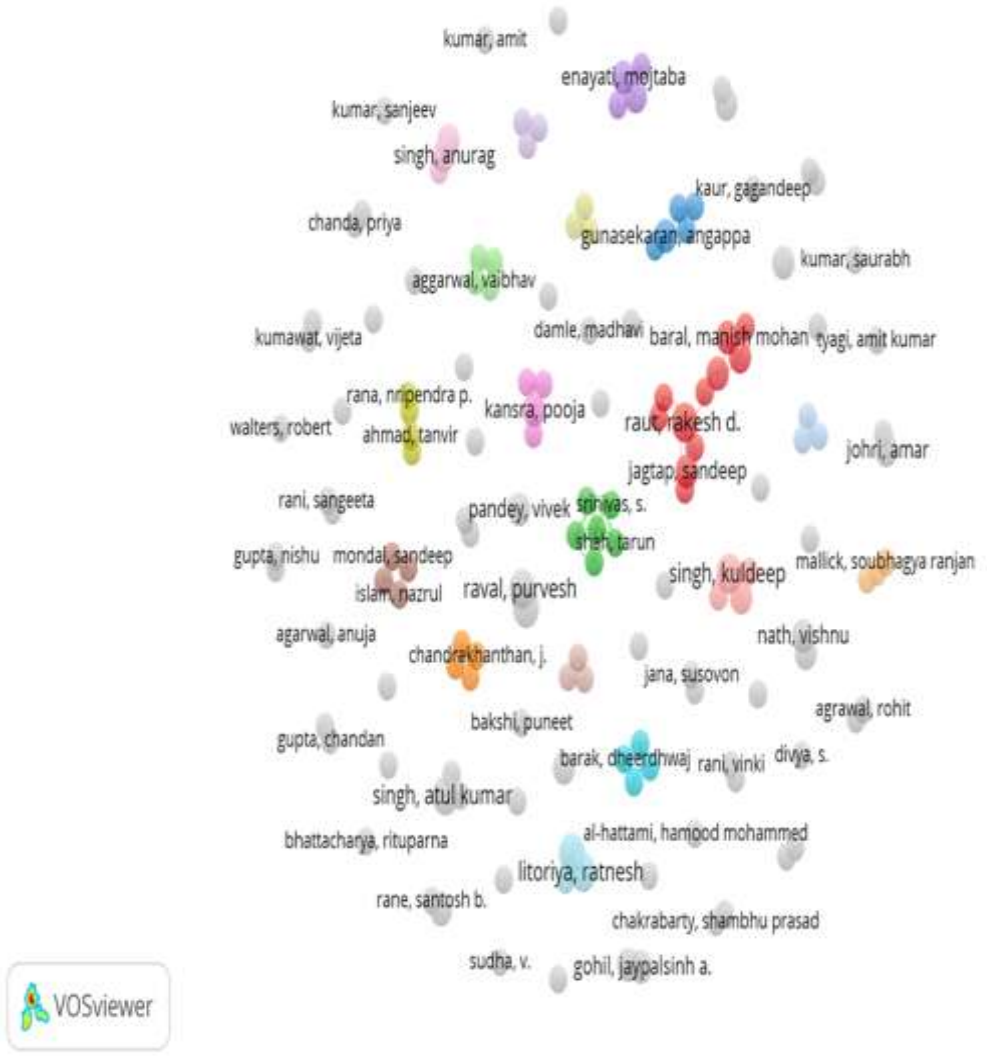


Figure 4.2: Co-authorship Network Visualisation

The largest single cluster of researchers with mutual co-authorship includes 11 authors (Baral, Chittipaka, Gupta R., Jagtap, Kumar Mukesh, Kumar Satish, Mukherjee, Narkhede, Raut, and Singh A.R., and Yadav V.S.), which focuses on blockchain and supply chain topics rather than cryptocurrency investment. In addition to this core group, collaboration in the data set is mostly divided into small teams of 2 to 4 researchers. This corresponds to the field where most Indian research output, especially conference papers and book chapters, is prepared by small local author team rather than big internationally connected research groups.

4.4 Keyword Co-occurrence Analysis

Author keywords were first analyzed without correction, using a minimum occurrence threshold of 5; this initial run yielded 267 items in 7 clusters connected by 6,637 links, but revealed a methodological issue: spelling and terminology variants of the same concept, most notably blockchain, block-chain, and blockchain technology, were treated by VOSviewer as distinct keywords and in some cases assigned to different clusters, artificially fragmenting what is conceptually a single term. A VOSviewer thesaurus file was constructed to merge spelling and plural variants (block-chain, block chain, blockchains into blockchain; smart contracts into smart contract; cryptocurrencies, crypto currency, and crypto-currency into cryptocurrency; investments into investment; bitcoins into bitcoin; digital currencies into digital currency; distributed ledgers into distributed ledger), deliberately excluding related but conceptually distinct terms such as investment avenues and investors from the merge.

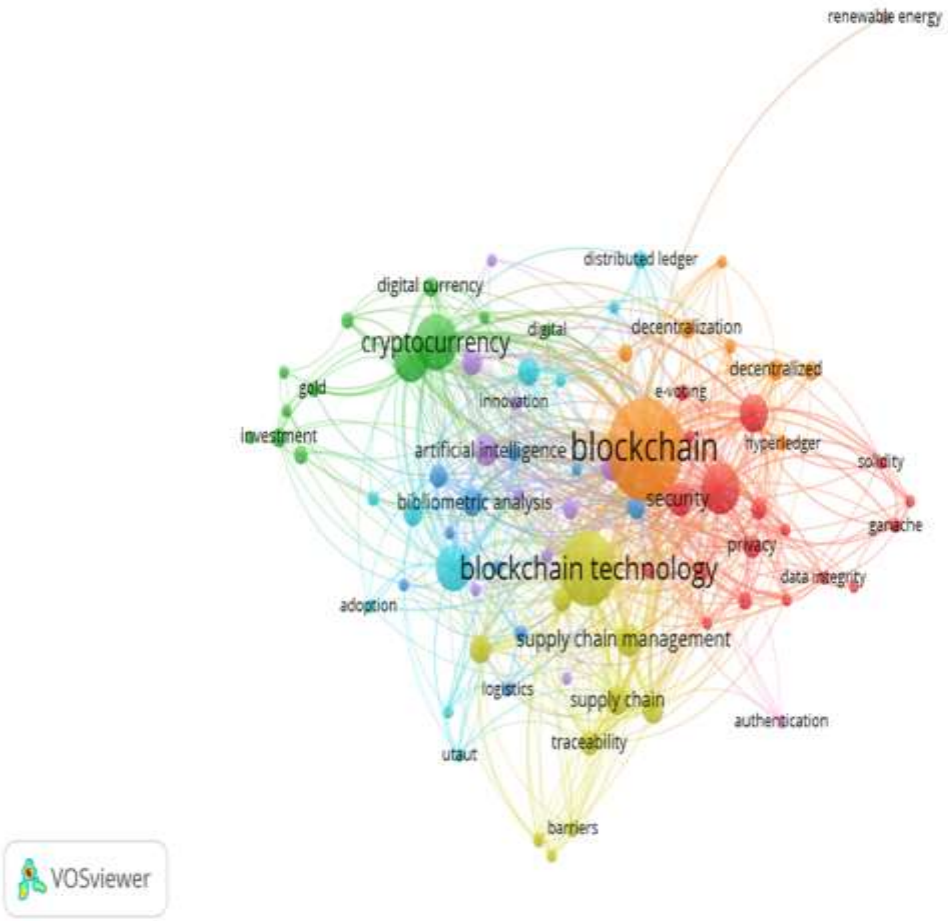


Figure 4.3: Keyword Co-occurrence Network Visualisation

After using a thesaurus, the analysis gave a smaller and more focused network with 80 items in 9 groups, linked by 616 connections with a total strength of 1,570. This merger worked well, as there are no longer any separate blockchain entries. The number of cryptocurrency mentions increased from 78 to 90 after including its different spellings, while investment options (6 mentions) and investors (5 mentions) stayed separate from investment (11 mentions). The most common keywords in the updated network are blockchain, appearing 299 times with a total link strength of 514, blockchain technology (156 occurrences, 208), smart contract (76 occurrences, 192), cryptocurrency (90 occurrences, 159), bitcoin (63 occurrences, 116), india (60 occurrences, 103), ethereum (40 occurrences, 97), security (32 occurrences, 94), transparency (23 occurrences, 72), and supply chain (25 occurrences, 63).

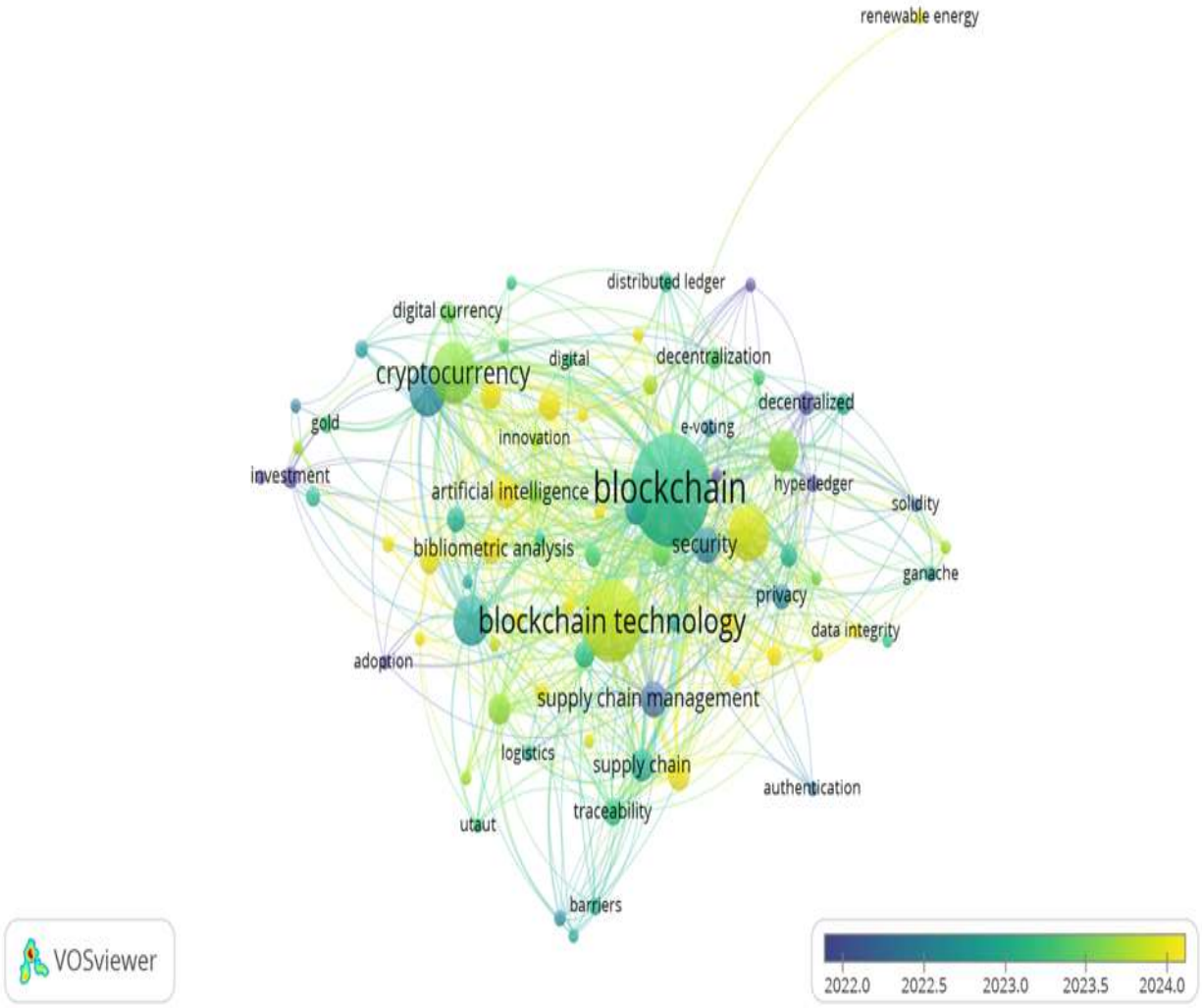


Figure 4.4: Keyword Co-occurrence Overlay Visualisation

The resulting cluster structure separates a cryptocurrency- and investment-themed cluster (cryptocurrency, bitcoin, investment, investment avenues, investors, gold, digital currency) from several technology-themed clusters: a security and smart-contract-development cluster (smart contract, security, privacy, hyperledger, solidity, ganache, data integrity), a supply-chain cluster (supply chain, supply chain management, logistics, traceability, barriers, UTAUT), and a core blockchain-infrastructure cluster (blockchain, decentralization, decentralized, e-voting). India appears as its own single-item cluster, distinct from the cryptocurrency and investment cluster, which differs from the uncorrected run in which india was grouped together with the investment-related terms; this difference reflects the tighter thresholding of the corrected network rather than a change in the underlying co-occurrence relationships, since india (total link strength 103) still co-occurs most strongly with the cryptocurrency and investment terms among all clusters in the map. Both runs used VOSviewer's default minimum-occurrence threshold; the substantially smaller item count in the corrected network (80 items versus 267) is larger than the thesaurus merge alone would be expected to produce, and may also reflect a difference in the default threshold VOSviewer suggested for the two runs. This does not affect the validity of the cluster structure reported above, but the exact settings of the corrected run should be re-verified against the VOSviewer session before this figure is finalized for submission.

4.5 Bibliographic Coupling of Documents

Bibliographic coupling, which links documents that draw on overlapping prior literature, was computed for all 879 documents using default VOSviewer settings. The resulting network includes 879 items in 258 clusters, connected via 10,037 links and possessing a total link strength of 15,517.

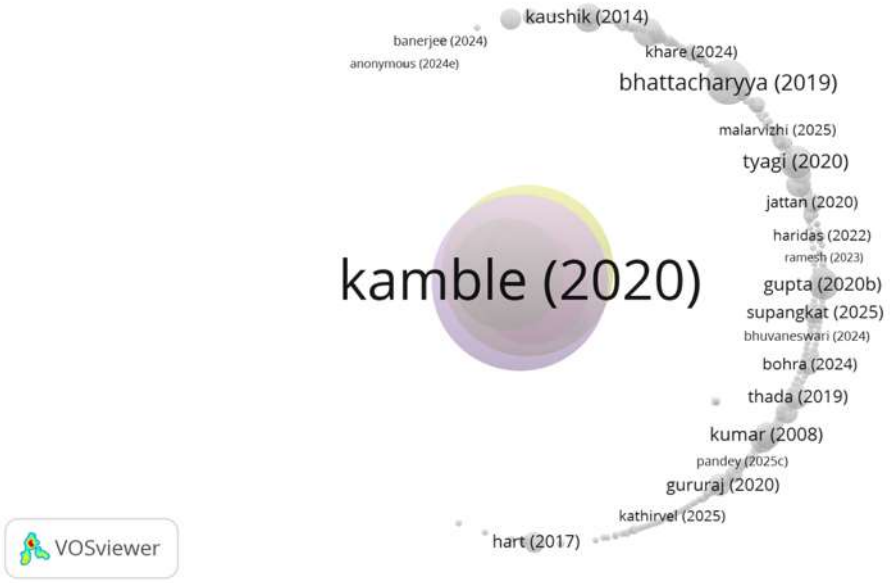


Figure 4.5: Bibliography Coupling Network Visualisation

The large number of clusters compared to documents (an average of 3.4 document per cluster), shows that the searched content includes various kinds of topics. Biographic coupling connects documents by similar references rather than broad topics, causing fragments of a diverse dataset into small, focused clusters rather than a few large ones.

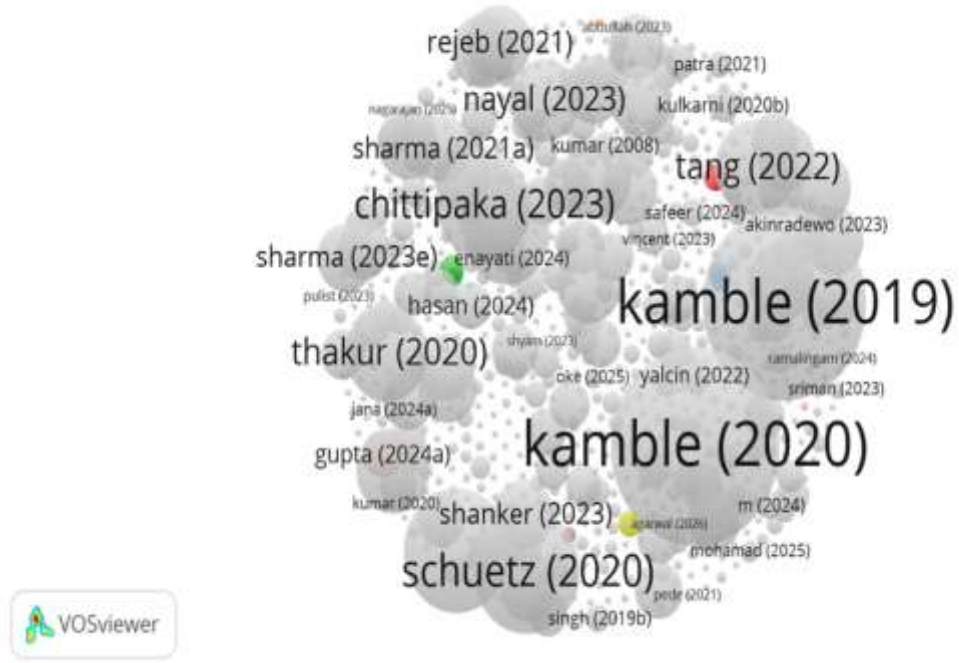


Figure 4.6: Citation Network Visualisation

The papers with the highest total link strength, showing the most overlap with other papers in the dataset, are Nayal (2023, total link strength 579), Khanna (2023, 498), Chittipaka (2023, 491), Baral (2022, 418), Jain (2022, 406), Kamble (2020, 381), Mukherjee (2023, 355), Samad (2023, 349), Rejeb (2021, 346), and Kumar (2022, 343). On its own, Kamble (2020), "Modelling the blockchain enabled traceability in agriculture supply chain" (International Journal of Information Management), is the most-cited paper in the whole dataset with 934 citations, even though it does not directly cite any other paper in the group, highlighting the difference between a paper's impact on the broader literature (citation count) and its role within the selected sample (coupling or direct citation links).

4.6 Co-citation Analysis

Co-citation analysis, which links cited references or cited authors that are referenced together by the documents in the dataset, produced a markedly denser network than direct citation: 75 items in 4 clusters, connected by 1,860 links with a total link strength of 11,949. The items with the greatest total link strength were Sharma S.K. (1,249), Sarkis J. (1,157), Lee J. (951), Kshetri N. (915), Kumar A. (818), Davis F.D. (644), Treiblmaier H. (631), Sharma N. (582), Shen L. (540), and Kumar V. (519).

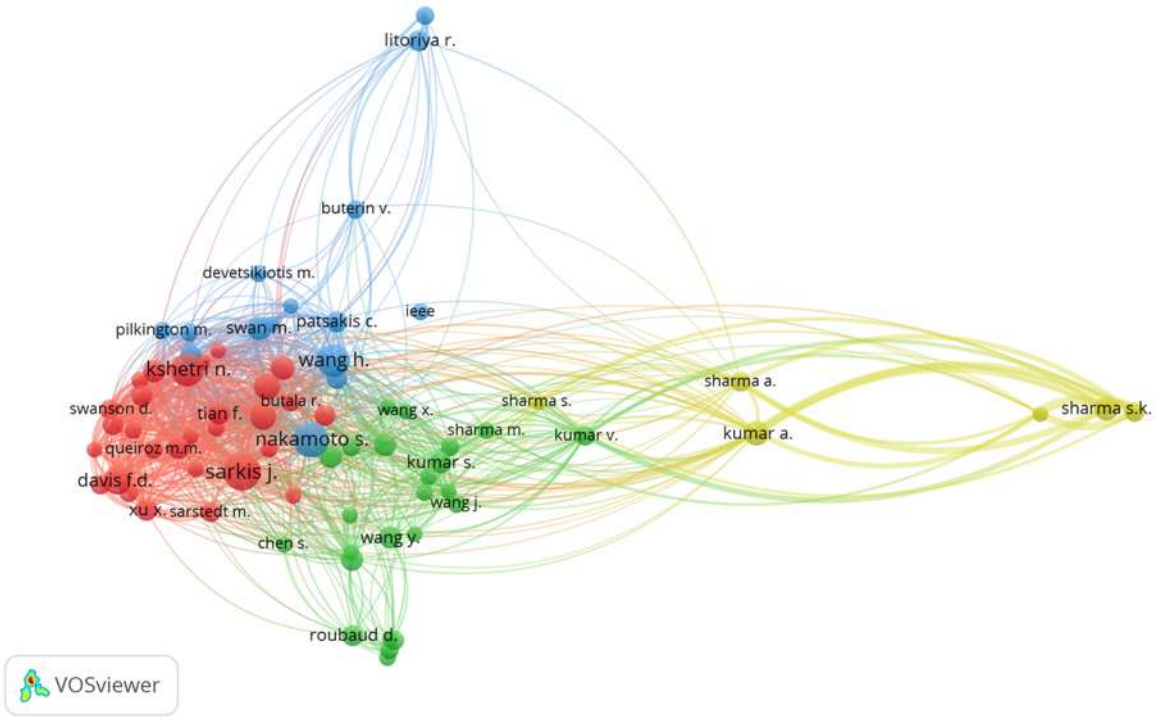


Figure 4.7: Co-citation Network Visualisation

The four clusters correspond to recognizable intellectual groupings. The first and largest cluster (approximately 30 items) includes Kshetri N., Sarkis J., Davis F.D., Ajzen I., Dwivedi Y.K., and Arha H., and centers on technology-adoption theory: Davis F.D. originated the Technology Acceptance Model and Ajzen I. the Theory of Planned Behavior, both foundational frameworks underpinning blockchain and supply-chain adoption research. The second largest cluster includes Nakamoto S., Buterin V., Devetsikiotis M., Patsakis C., and Swan M., and reflects the foundational Bitcoin, Ethereum, Cryptocurrency and Blockchain technology literature, references that are cited across nearly all blockchain-related work regardless of sub-topic. The third cluster, comprising of Wang X., Kumar D., Chen S., Roubaud D., and Gupta R., forms a secondary technology and Supplychain oriented grouping. The fourth cluster, which is clearly different and loosely connected to the rest includes Sharma S.K., Sharma A., Kumar A., and Kumar V., who correspond to investment literature related to India.

4.7 Synthesis: The Investment Strand within the Wider Literature

Two distinct studies, of which one focuses on keywords and the other on citations but both show a similar trend. In the keyword analysis, words associated with cryptocurrency and investment, such as Bitcoin and digital currency, have been grouped together and disassociate them from technology related terminology like Blockchain and Smart-contracts. In the citation study, Indian investment literature by authors like Sharma S.K. and Sharma A., has been grouped together and blockchain technology works by Nakamoto and Buterin, and technology adoption theory by Davis and Ajzen, separated. That this separation appears in both the subject matter of the literature (what the documents discuss) and its intellectual framework (what the document cite) provides solid evidence, directly addressing research Question 4: the cryptocurrency investment aspect is a separate and standalone, weakly connected subfield in the broad Cryptocurrency and Blockchain literature indexed in Scopus, rather than a theme that is spread evenly across it. Taken together with the performance analysis in Section 4.2, which shows this literature concentrated in the 2019-2024 period, dispersed across 623 sources, and predominantly but not exclusively India-affiliated (84.1% of documents, with 13.2% showing international co-authorship), the results indicate a young, fast-growing, and internally differentiated field in which the investment-focused strand is identifiable but still thematically and intellectually separate from the broader blockchain-technology literature in which it is embedded.

5. Discussion

5.1 Principal Findings

The results answer the four research questions addressed by the bibliometric analysis. On publication output (Question 1), the field is new and expanding rapidly, with more than 85 percent of the 879 documents published between 2019 and 2024 and annual output still rising through the most recent complete year. However, with influential contributors (Question 2) articles spread across 623 sources and 2606 different authors and India accounts for 84.1% of the related documents but only 13.2% have international co-authors and teamwork is organised around small, mostly local groups instead of a few large, globally recognised teams. For influential documents (Question 3), bibliographic coupling shows Nayal (2023), Khanna (2023), and Chittipaka (2023) as the documents most closely linked to the rest of the literature through shared references, while Kamble (2020) is the single most-cited document in the dataset even though it has limited structural links to other documents found, highlighting that citation impact and bibliometric centrality within a sample are related but different qualities. Regarding thematic structure (Question 4), both keyword co-occurrence and co-citation analysis, share the same conclusion, the cryptocurrency investment area forms a distinct and identifiable group that is very loosely connected to the broad field of blockchain technology research.

5.2 The Investment Part of the Broader Blockchain Discussion

The split between the literature on investment and the literature on technology, seen separately in both the topic structure (how keywords appear together) and the idea structure (how papers are cited together) of the dataset, indicates that these two parts have grown mostly on their own rather than as one combined field. The technology strand draws heavily on foundational computer-science and operations-management references, including the original Bitcoin and Ethereum descriptions and technology-adoption frameworks such as the Technology Acceptance Model and the Theory of Planned Behavior, and is applied extensively to supply-chain, traceability, and security problems. The investment strand, by contrast, draws on finance and economics framings, cryptocurrency, gold, digital currency, and investment avenues, and remains comparatively small within the overall dataset. This pattern is consistent with the research gap identified in Section 2.8, that the investment-focused crypto literature is smaller and less cited than the blockchain-applications literature, and it indicates that researchers working on the financial and investment dimensions of cryptocurrency in India draw on a different reference base than those working on blockchain technology applications, with limited cross-citation between the two.

5.3 Implications

For investors, the results indicate that rigorous, India-specific academic research on cryptocurrency as an investment avenue is a comparatively recent and still-developing body of work, concentrated in a minority of the retrieved documents and not yet as deeply integrated with the international finance literature as the technology-adoption literature is with its own international foundations.

Four regulatory bodies, the output is spread across 623 district sources, many of which are conference proceedings and edited volumes rather than peer reviewed journals. The research gap mentioned in section 2.8, that Indian legal and behavioural studies are scattered and frequently just descriptive rather than based on data, this indicates that the evidence base available to formulate cryptocurrency and digital asset policy in India is still in pieces. Consolidating this literature, as this bibliometric mapping begins to do, is a necessary step toward a more evidence-grounded policy discussion.

For academics, the fragmented co-authorship structure identified in Section 4.3, in which the largest connected group of researchers numbers only 11 and most collaboration occurs in small two- to four-author teams, points to an opportunity for larger, more coordinated research programs, particularly ones that deliberately bridge the technology and investment strands identified in Section 4.4 and Section 4.6 rather than treating them as separate literatures.

5.4 Research Gaps and Future Directions

Building on the research gap identified in Section 2.8 and the patterns observed in the results, four directions for future research are indicated. At first, there was less research on investments compared to technology. It would benefit from more studies that specifically look at diversification, hedging, and safe havens using data from Indian investors, rather than using methods designed for other markets. Second, India's legal and regulatory studies are scattered throughout the country. These would benefit significantly from accurate data driven analysis of evolving tax and regulations, rather than descriptive studies. Third, the low rate of international co-authorship 13.2 %, suggests an opportunity for Indian researchers to build collaborations with the more internationally networked technology-adoption research community identified in the co-citation analysis, potentially narrowing the separation between the two strands observed in Section 5.2. Fourth, future bibliometric work in this area would benefit from a more precisely targeted search strategy than the one available for this study (Section 3.2), to isolate the crypto-investment literature more cleanly from the broader blockchain-technology literature in which it is currently embedded.

6. Conclusion

This study set out to map the Scopus-indexed literature on cryptocurrency, blockchain, and investment avenues in India, and to show how the investment-related strand fits within the wider field. Using bibliometric analysis of 879 Scopus-indexed documents, the study makes three contributions. First, it presents a systematic map of scattered and India centric literature that has grown rapidly since 2019, yet this spreads across over 600 sources and is mainly restricted to small local research teams. Second, it separates the technology and investment strands of this literature, showing through two independent analytical approaches, keyword co-occurrence and co-citation, that the investment-related research constitutes a distinct sub-field that is only loosely integrated with the larger body of blockchain-technology research. Third, it points out certain areas that need more attention, like not enough research on how Indian investors behave, scattered and mostly descriptive rules and regulations, and not much teamwork with other countries. These points can help guide future studies and provide useful information to investors, regulators, and scholars.

These results have some limitations mentioned in Section 3.6, such as the scope of the search method used, only looking at sources indexed in Scopus, issues with identifying authors correctly, and the fact that citation counts are only up to a certain time. Despite these limitations, the study offers the first organised, data-based look at how research on cryptocurrency, blockchain, and investments in India has grown, and it sets a starting point for future, more focused studies on investments.

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