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CiteSpace-Based Visual Analysis of the Development History of Digital Currency

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Abstract

As a new emerging payment method, digital currency features low transaction costs and fast processing speeds, providing convenience for transactions. Simultaneously, it has also impacted traditional financial systems, attracting widespread attention from various sectors of society. This paper selects the China National Knowledge Infrastructure (CNKI) database as its data source and employs CiteSpace literature visualization software to conduct a visual analysis of core journal articles published from 2013 to 2023. By constructing author collaboration networks, institution collaboration networks, and analyzing keyword co-occurrences and clusters, this study aims to map the knowledge landscape of Chinese digital currency development. It explores research hotspots and development trends, offering insights for the advancement of research in this field.

Keywords

CiteSpace; Digital Currency; Visual Analysis.

1. Introduction

The study of digital currencies gradually emerged in the early 21st century. In 2008, Satoshi Nakamoto released the paper "Bitcoin: A Peer-to-Peer Electronic Cash System", which proposed a decentralized electronic currency system based on blockchain technology - Bitcoin. The emergence of Bitcoin triggered extensive discussion and research on digital currencies, and also promoted the development of digital currencies. Digital currencies are virtual electronic currencies, which are based on cryptography technology and digitize the traditional form of money on the Internet, ensuring the security and anonymity of transactions through specific encryption algorithms. Digital currencies are still not explicitly regulated, and as digitized currencies they are mainly issued by developers and managed by themselves, while being traded and used by members of some virtual communities[1].

In recent years, with the rapid development of the Internet, the digital economy has become an important part of the global economy. And digital currency, as an important form of expression of the digital economy, is gradually emerging. The background of the emergence of digital currency can be traced back to the dissatisfaction of the traditional monetary system and the demand for the development of the digital economy, the inadequacy of the traditional monetary system, the rapid development of the digital economy coupled with the promotion of financial innovation are important factors that make the rise of digital currencies and the continuous development. First of all, relative to the traditional monetary system digital currency is to decentralize the existence of the way, through the blockchain technology to achieve the point-to-point transactions, greatly reducing the transaction costs and improving the transaction efficiency; at the same time, the circulation of digital currency is not subject to geographical and national boundaries, which is conducive to promoting the facilitation of international trade, and

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promoting the development of the global economy. Secondly, with the popularization of the Internet and technological progress, the digital economy has become an important engine for driving economic growth, and the emergence of virtual assets and digital property rights in the digital economy has led to an increasing demand for digital currencies; at the same time, digital property rights also occupy an important position in the digital economy. The emergence of digital currency can facilitate the transaction of these digital property rights and promote the prosperity of the digital economy. In addition, the cumbersome processes and high fees of the traditional financial system make the demand for new financial instruments increasingly urgent. Blockchain technology, the technical basis of digital currency, has the characteristics of distributed ledger and information tampering, which provides a reliable foundation for the development of digital currency; at the same time, the convenience and low transaction fees of digital currency have attracted more and more users, and people make cross-border payments through digital currency without going through the complicated clearing and settlement procedures, which reduces the cost of the digital economy. clearing and settlement procedures, reducing transaction costs and improving payment efficiency[2].

Due to the advantages such as cost reduction, scalability expansion, enhanced credibility, accelerated currency dissemination, user privacy protection, and maintenance of social order and stability, the exploration of central bank digital currencies (CBDCs) is increasingly gaining momentum worldwide[3]. Since 2022, there has been a critical shift in the market regulation and development direction of digital currencies, and its related contents have been analyzed and discussed, but few scholars have carried out a visual analysis of the development of digital currencies through the measurement of its related literature. In view of this, this paper uses CiteSpace bibliometric software to visualize and analyze the digital currency-related academic papers published in CNKI database from 2013 to 2023, and to analyze the research trends and development directions, with a view to providing reference and direction for the research of digital currency.

2. Data Collection and Research Methodology

2.1. Data Collection

The data of this paper is obtained from CNKI database of China Knowledge Network, the advanced search subject term is set as "digital currency", the year interval is set as 2013-2023, and the literature comes from the core journals of Peking University, and a total of 1,068 pieces of related literature are found after searching, screening and processing.

2.2. Research Methodology

The research conducted in this paper adopts the bibliometric method and the knowledge graph recognition method, using CiteSpace 5.8.R3 bibliometric visualization software to retrieve the literature in the data preprocessing as the raw data, import the data into CiteSpace for data recognition, and with the help of CiteSpace's computerized image processing technology will be recognized by the data automatically converted into images, and set the relevant parameters in different situations so as to carry out the measurement and analysis. The relevant parameters in different situations are set so as to carry out econometric analysis. After CiteSpace processing, the relationship network of authors, keywords and institutional cooperation in the original data is visualized through an intuitive knowledge map, which is convenient for interpretation and analysis.

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3. Current Status of Digital Currency Research in China

3.1. Analysis of Annual Volume of Publications

Using CiteSpace software can visualize the research hotspots, main researchers and research institutions in the field of digital currency through the form of knowledge map, so as to intuitively understand the current status of research in the field of digital currency in China. The number of papers published in a certain field is one of the most important indicators of the level and development of academic research in that field. An important point to grasp the current research status of the digital currency field is to analyze the annual publication volume of its field. In this paper, we use the advanced search of CNKI database to get the number of papers published in the field of digital currency in the core journals of Peking University in each year from 2013 to 2023, and draw a statistical chart of the annual publication volume according to it (see Fig. 1). According to the data shown in Fig. 1, we can divide the domestic research in the field of digital currency in the past 10 years into four stages. The first stage is the budding period, from 2013 to 2015, during which a total of six papers were published in the core journals of Peking University. In 2013, China's first bitcoin trading platform, Firecoin.com, was established, marking the official entry of bitcoin into the Chinese market. With the entry of Bitcoin into China, a small number of scholars began to conduct research on digital currencies. The second stage is the development period, the time is 2016-2018, in 2014, the People's Bank of China set up the Digital Currency Research Institute, began to research and develop the central bank's digital currency, thus more and more scholars are researching and discussing digital currencies in the next few years, and the number of published papers in the field of digital currencies in Beida core journals is increasing year by year. The third stage is the peak period, which takes place in 2019-2020, when the digital RMB began to conduct closed internal pilot tests in late 2019 and early 2020, by which time the research fever of China's digital currencies peaked, and the number of papers published in the relevant field of core journals of Peking University soared from 115 in 2019 to 217 in 2020, with a year-on-year growth of 88.70%. The fourth stage is the decline period, from 2021 to 2023, although the digital RMB is being piloted in more cities and scenarios in the next few years, its development trend is steadily increasing, and the controversy over whether it can be circulated in the market in the future is getting smaller and smaller, and its research heat is starting to decline, and the number of articles in the related fields of NU core journals has declined year by year in these years, though the declining trend has The number of papers published in the core journals of NU in this field has been decreasing year by year, but the decreasing trend is slower, which means that there is still a relatively high degree of heat in this field.

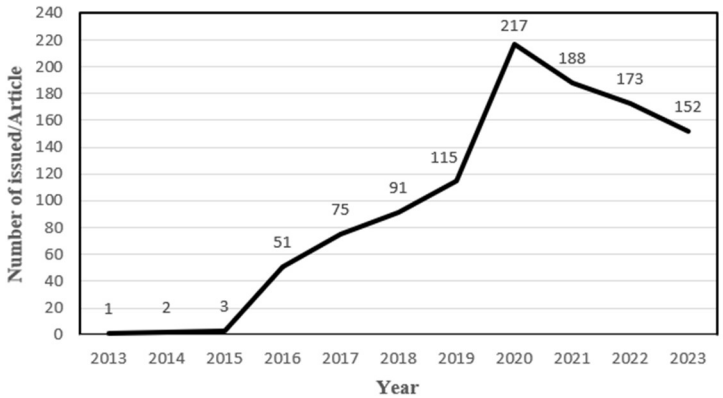


Fig. 1 Statistical chart of the number of articles issued per year

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3.2. Analysis of Major Research Scholars

3.2.1. Frequency Analysis of Author's Publications

The data of 1068 documents were imported into CiteSpace visualization software, and the parameter panel was set as follows, and other parameters were kept unchanged. Operate to get the nodes and other related data to obtain the knowledge graph of author cooperation in the field of digital currency. Among them, the data of the top ten authors in terms of the frequency of publication are shown in Table 1. As shown in Table 1, the top 10 authors in terms of frequency of publication among the 1,068 papers published in the core journals of Peking University in 2013-2023 in the field of digital currency in China are Yao Qian, Yang Dong, Cheng Xuejun, Ke Da, Yuan Zeng, Wu Tong, Zhuang Lei, Feng Sixian, Chen Weiguang, and Wang Xin, with the frequency of 13, 12, 11, 10, 6, 6, 6, 5, 4, and 4, respectively. 4 and 4. Judging from the frequency of articles in the past 10 years, the above authors have made more in-depth research in the field of digital currency in China and have made more contributions to the field.

Table 1. Statistics of Top 10 Authors with High Publication Volume

Volume	Year	Author
13	2016	Yao Qian
12	2019	Yang Dong
11	2022	Chen Xuejun
10	2019	Ke Da
6	2021	Yuan Zeng
6	2019	Wu Tong
6	2019	Zhuang Lei
5	2019	Feng Sixian
4	2021	Chen Weiguang
4	2017	Wang Xin

3.2.2. Analysis of Author Collaboration Networks

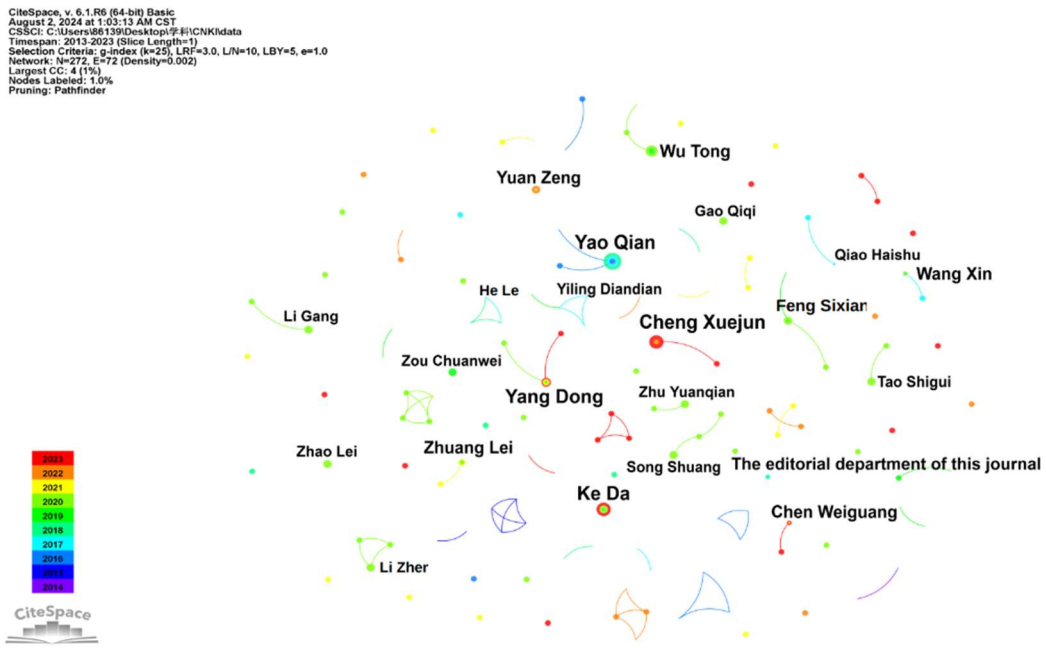


Fig. 2 Author collaboration knowledge graph

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As shown by the visualization of the author cooperation knowledge graph, there are fewer connections between author nodes in the field of digital currencies, and most of the authors with a high frequency of publication do not have connections between them, which indicates that the research authors in this field are relatively less closely connected or cooperating, and that there is no large-scale research team on digital currencies in China at present.

From the basic information of the authors displayed, it can be seen that the location area of the authors' distribution is not balanced, mainly with Beijing as the core, and distributed sporadically throughout the country. This can further indicate that scholars in this field have relatively few contacts, and the authors of the published articles rarely cooperate. In addition, it can be learned through the author's year of publication that in recent years, the central bank digital currency in the field of digital currency has a high degree of heat, there is a certain connection between digital currency and blockchain and with the depth of the research, the combination of the two is conducive to the progress of the digital currency, the researchers and scholars in the field of digital currency need to strengthen the cooperation and contact, to accelerate the development of the research of China's digital currency.

3.3. Analysis of Major Research Institutions

The visualization analysis of institutional cooperation is carried out in CiteSpace visualization software, and the operation obtains node N=262, the number of connecting lines E=71, and the network density D=0.0021. Entering the visualization interface of the knowledge graph, the knowledge of institutional cooperation in the field of digital currencies in China from 201-2023 is clearly shown through the adjustment of some display values mapping, as shown in Figure 3. As can be seen from Fig. 3, the degree of cooperation among research institutions in the field of digital currency in China is low, and most of them conduct independent research in this field. In terms of the number of publications, the core research institution in the field of digital currency research in China is the Institute of Finance of the Chinese Academy of Social Sciences (CASS), which has published as many as 28 articles, far more than other research institutions. In addition, from Fig. 3, we can see that the Institute of Finance of the Chinese Academy of Social Sciences, the Institute of World Economics and Politics of the Chinese Academy of Social Sciences, the School of Law of Renmin University of China, and the China Academy of Financial Sciences have multiple lines between these four institutions and the nodes of the other institutions, which shows that the above institutions have a stronger sense of cooperation in the field, and have a certain degree of cooperation with a large number of institutions, which also indicates that the above institutions have a greater academic contribution and influence in the field of digital currency in China. field with greater academic contribution and influence. In addition, through the number of research institutions in each geographical region, the total number of articles issued in each geographical region and the degree of cooperation among research institutions in each geographical region, Beijing and Shanghai are in the leading position in the field of digital currency in China, while Renmin University of China is the most in-depth in the field of digital currency among the domestic colleges and universities, and the university has a higher influence in the field of digital currency in China.

At present, the research in the field of domestic digital currency is still continuing to advance, and it is believed that the research institutions in this field will have more and more cooperation and exchanges in the future, so as to further accelerate the research in the field of China's digital currency and enrich the research results in the field of China's digital currency through mutual learning and information sharing.

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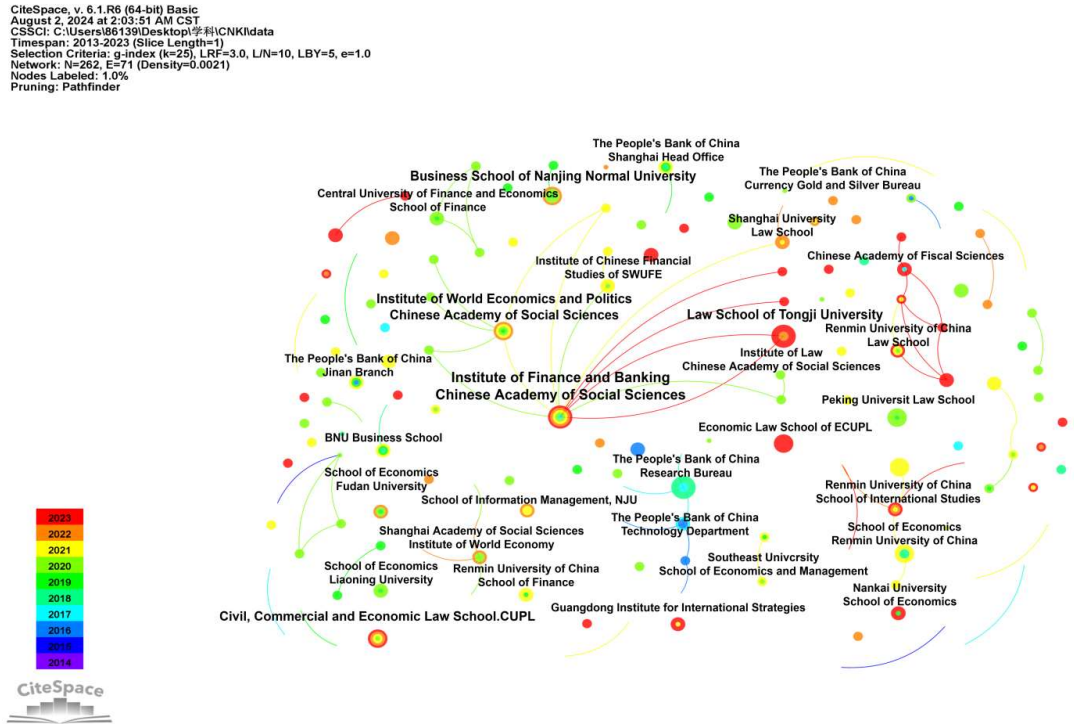


Fig. 3 Institutional collaboration knowledge graph

3.4. Analysis of Research Hotspots

3.4.1. Keyword Co-occurrence Analysis

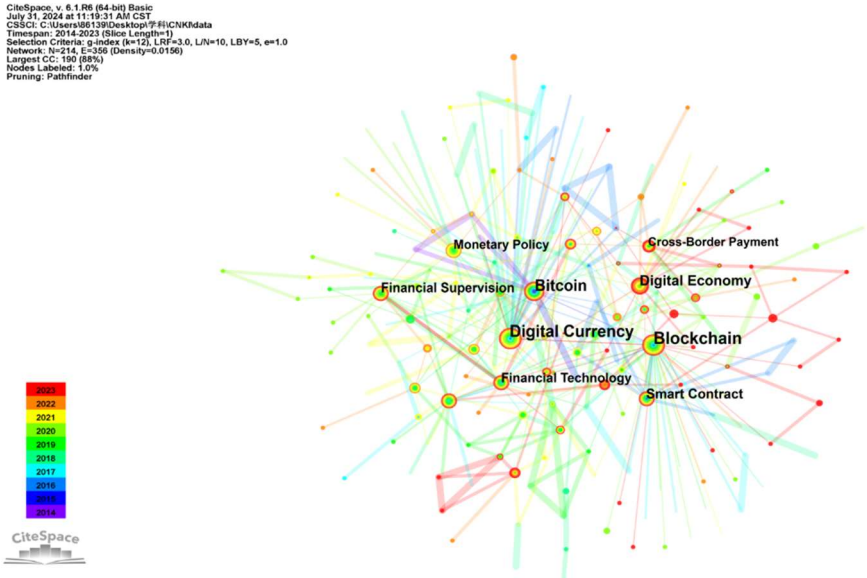


Fig. 4 Keyword co-occurrence knowledge graph

Keywords refer to a few words that are particularly important or prominent in a dissertation, they will appear repeatedly in the dissertation and are closely related to the main content of the dissertation, the number of which is usually 3~8 per dissertation. Keywords are selected because they can accurately summarize the topic, content or research focus of the paper, and help readers quickly understand the topic and core content of the paper.

The data of 1068 papers were imported into CiteSpace visualization software for visual analysis of keyword co-occurrence, and the operation yielded nodes N=214, number of connections E=356, and network density D=0.0156.

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Through the keyword co-occurrence of can simply and clearly show the hotspots in the research field, the keyword co-occurrence of the visualization of the graph can provide some help for the research of the hotspots in the field. Fig. 4 is the keyword co-occurrence knowledge graph generated based on CiteSpace in the field of digital currency, each node in the graph represents a keyword, and the frequency of keywords affects the size of the node, and the higher the frequency, the larger the node. From Fig. 4, it can be clearly seen that the research hotspots focus on the three keyword nodes of digital currency, blockchain and bitcoin.

After analyzing the results of centrality calculation, the top ten keywords in the order of frequency of occurrence are extracted by excluding the search subject term "digital currency", as shown in Table 2. Among them, the intermediary centrality of "blockchain" far exceeds that of other keywords, and its frequency of occurrence is far ahead of other keywords, indicating that it is in the core focus of the digital currency field, and belongs to the key pivot and core content of the digital currency field, which is widely concerned in the field and has a great influence. "Bitcoin," "digital economy," "fintech," "monetary policy," and other intermediaries are relatively high in centrality. Keywords such as "bitcoin", "digital economy", "financial technology", "monetary policy" and other keywords with relatively high intermediary centrality are now the key research directions in the field of digital currency, and they have a greater potential to become the core research directions in this field in the future. From the point of view of the number of node connections, the keywords that appear more frequently in the field of digital currency belong to important nodes, and they are more closely connected with each other and with other less frequent keywords, but the degree of closeness of the connections between the less frequent keywords is relatively low, so it can be seen that the research content in the field of digital currency mainly centers on a few high- frequency nodes, and the closeness of the connections between their respective branches is relatively low. Overall, the degree of closeness of their respective branches is relatively low, and the cooperative research among various branches in the field of digital currency needs to be promoted.

Table 2. Statistics of research frequency keywords

Frequency	Centrality	Year	Keyword
246	0.61	2015	Blockchain
68	0.25	2013	Bitcoin
50	0.16	2020	Digital economy
46	0.13	2016	Financial technology
36	0.18	2016	Monetary policy
36	0.06	2016	Financial supervision
35	0.12	2016	Smart contract
27	0.04	2019	Cross-border payment
25	0.04	2016	Virtual currency
24	0.13	2016	Decentralization

3.4.2. Keyword Clustering Analysis

Keyword clustering is the process of grouping or clustering keywords in text data according to their similarity, which can show the thematic and semantic associations between keywords more clearly, and facilitate a deeper understanding of the structure and content of this paper.

On the basis of keyword co-occurrence processing, keyword clustering is realized by using the clustering function of CiteSpace software, and the number of displayed keyword modules is adjusted to 10 to get the top 9 keyword clustering modules, as shown in Fig. 5. As can be seen from Figure 5, the keyword clustering knowledge graph in Modularity Q = 0.6483, much larger than 0.3, indicating that the clustering effect is significant; Silhouette S = 1, much larger than

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0.5, indicating that the clustering results are reasonable and trustworthy; (Q, S) = 0.7866, indicating that the clustering results are highly referential.

As can be seen from Fig. 5, the clustering results yielded 9 major clustering information of "metaverse", "digital currency", "bitcoin", "digital economy", "blockchain", "digital finance", "smart contract", "monetary policy" and "cross-border payment", each of which can be regarded as a research hotspot, and these major clusters of information are also the top 9 research hot spots in the field of digital currency at the moment. From the content of the clustered information, the domestic digital currency field on the one hand, blockchain, bitcoin, digital economy still maintains a high degree of heat, on the other hand, the rise in the heat of the keywords such as digital finance, smart contract monetary policy and cross-border payment also shows that the digital currency is constantly developing towards the realization of the use and promotion.

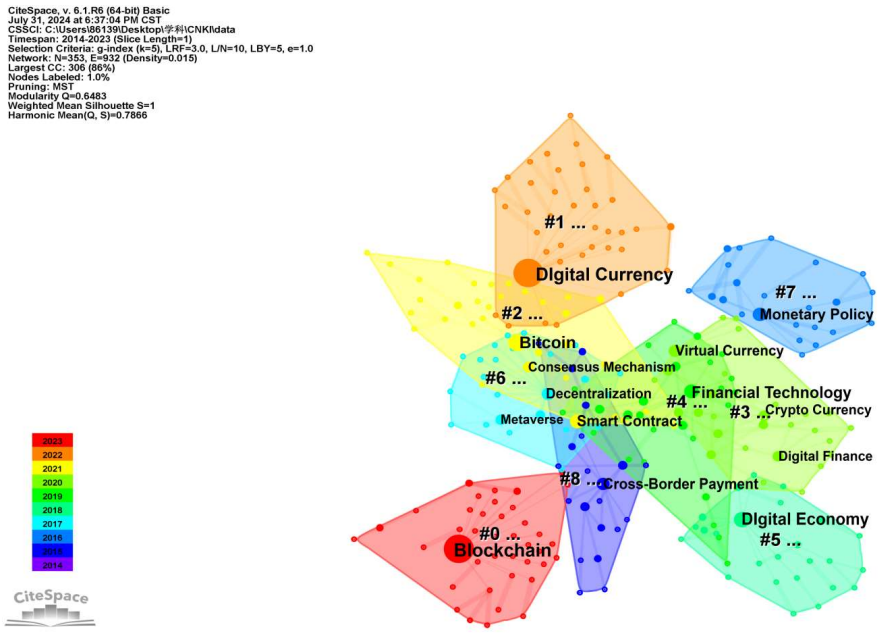


Fig. 5 Keyword clustering knowledge graph

3.4.3. Keyword Clustering Timeline Analysis

Keyword clustering timeline refers to the process of organizing keywords with similar contexts or themes in chronological order after classifying them based on the keywords in the text data by means of cluster analysis, and its visualization results can reveal the evolution and changes of the keywords in the time dimension. On the basis of keyword clustering, Layout-Timeline View in the control panel is selected for timeline analysis, so as to obtain the keyword clustering timeline of the domestic digital currency field from 2013 to 2023, as shown in Fig. 6. The contour value in its visualization results represents the clustering similarity, and the average contour value (Q, S) of clustering is used to judge the data clustering credibility, and the actual results of CiteSpace visualization software show that the value of (Q, S) is 0.6007, which indicates that the credibility of the timeline clustering results is very high, and has a strong reference value. As can be seen from Figure 6, the keywords digital currency and bitcoin already appeared in 2013, and the keyword blockchain appeared by 2015, before 2015, in addition to the above three core keywords, very few other keywords appeared, indicating that during this period, the domestic digital currency field is less hot, and the research in this field basically has not been carried out, and the research is still in the initial stage. after 2015, the heat in the field of digital currency Surge, the emergence of many hot keywords, the timeline is much denser than before, since the period from 2015 to 2023, although the number of new keywords in some

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years has a downward trend, but overall the heat in the field of digital currency during this period is maintained at a high level; and as can be seen in Fig. 6, a large number of cross-clustering connectivity has been formed during this period, which indicates that a large number of scholars are carrying out the field's research from multiple perspectives.

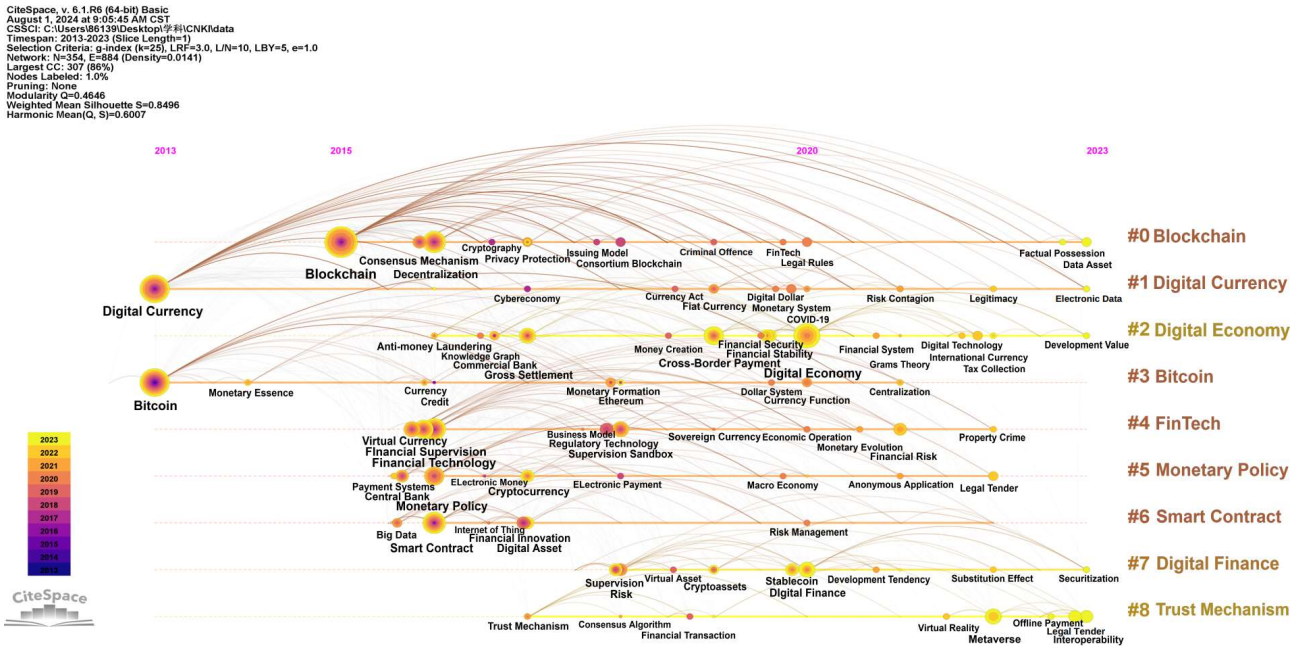


Fig. 6 Timeline of keyword clustering

3.4.4. Mutant Word Analysis

Top 24 References with the Strongest Citation Bursts

References	Year	Strength	Begin	End	2014 - 2023
Bitcoin	2014	6.84	2014	2018	
Credit	2016	2.01	2016	2018	
Artificial Intelligence	2016	1.00	2016	2018	
Financial Innovation	2017	2.37	2017	2020	
Decentralization	2016	1.87	2017	2019	
Fiat Currency	2017	1.06	2017	2018	
Cloud Computing	2017	0.85	2017	2019	
Regulatory Technology	2018	3.88	2018	2019	
Supervision	2018	1.86	2018	2019	
Financial Technology	2017	1.14	2018	2020	
Risk	2018	1.00	2018	2020	
Regulatory Sandbox	2018	0.47	2018	2019	
Central Bank	2016	0.26	2018	2019	
Legal Tender	2019	1.21	2019	2021	
Global Governance	2019	1.08	2019	2020	
Cryptocurrency	2019	0.76	2019	2020	
Sovereign Currency	2019	0.74	2019	2020	
Functions of Money	2020	1.40	2020	2021	
COVID-19 Pandemic	2020	1.12	2020	2021	
Financial Risk	2021	2.83	2021	2023	
Financial Stability	2020	1.80	2021	2023	
Centralization	2021	1.41	2021	2023	
Currency Essence	2014	1.07	2021	2023	
Commercial Bank	2017	0.73	2021	2023	

Fig. 7 Analysis of mutant words

Mutant words are keywords whose word frequency rises or falls significantly within a certain time window, reflecting the heat and change trends of research topics in the subject area. The study of mutant words not only has intelligence significance and can predict the research frontiers and research hotspots in subject areas, but also has practical application value. The

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TOP24 mutant words in China's digital currency research field are selected in CiteSpace to draw a mutation map, as shown in Fig. 7. As can be seen in Fig. 7, "bitcoin" is the keyword with the longest duration of mutation, with a span of 5 years. Bitcoin is an extremely hot form of currency in the early days of the digital currency field, and digital currencies include bitcoin, which has a certain representative role in digital currencies. Credit, artificial intelligence, financial innovation, decentralization, credit currency and cloud computing and other keywords that emerged earlier and are closely related to the central bank's digital currency have gone from a surge in heat to a gradual decline, indicating that 2016-2019 is the main research and development period for China's central bank's digital currency, and that China's research in the field of digital currencies is about to enter a new stage of development.2021 Since "financial risk", "financial stability", "centralization", "currency essence" Keywords such as "financial risk", "financial stability", "centralization", "currency essence" and "commercial bank" have become research hotspots, indicating that issues related to transaction risk and financial security have been put on the agenda, and that security issues in the field of digital currency have been emphasized in the research field.

4. Summary

4.1. Current Status of Research in the Field of Domestic Digital Currency

According to the clustering analysis of the research hotspots and keywords of the domestic digital currency, it can be seen that the research in the field of digital currency in China mainly focuses on the research and use of the central bank's digital currency. In 2014, the People's Bank of China began to carry out formal research in the field of digital currency, which represents that China has officially begun to carry out the prospective research and development of the country's central bank's digital currency; at the end of 2019, The People's Bank of China officially launched the pilot work of digital RMB, carrying out multi-city and multi-form pilot, gradually allowing digital currency to be promoted and applied in China. China has gradually launched research in the field of digital currency since the entry of Bitcoin into China in 2011, and up to now it has only been more than ten years, so now China's research in this field is still in the early stage of rapid development, and there is still a long way to go before the full application and promotion of digital currency is realized.

4.2. Directions in the Field of Digital Currencies

The emergence of digital currency is to a certain extent expected to solve the problems of high transaction costs, cumbersome transaction processes, and high transaction risks that exist in the traditional currency system, which is also an important reason for the rise of digital currency, so the research results of digital currency have become particularly important for the conversion of digital currency to digital currency valorization, and the circulation of the virtual economy. That is, let people recognize the digital currency, through a certain exchange ratio makes the virtual currency has the actual value, can be exchanged with the traditional physical currency in accordance with a certain ratio, so as to realize the promotion and application of digital currency. China's research is mainly to promote the digital RMB, so the digital RMB is linked to the real economy, so that the value scale of the digital RMB can be measured and recognized by the people, which is an important development direction of China's research in the field of digital currency[4]. In the future outlook of national policy support and research technology breakthroughs, realizing the convenience and benefit of digital RMB and promoting the further development of China's economy are the trend and direction of China's research in the field of digital currency.

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4.3. Risk Identification and Legal Policy Issues

Keywords such as "financial stability" and "financial regulation", which are highly popular in the field of digital currencies, indicate that attention should be paid to the avoidance of financial risks and the improvement of laws and regulations in the process of their development and promotion. The decentralization of digital currency applications achieves a high degree of anonymity, which may increase the risk of crime; in addition, as a new type of electronic virtual currency, and these major clusters of information are also the top 9 research hot spots in the digital currency space right now. There are also other credit risks, reputation risks and regulatory risks that need to be reduced and identified, which are undoubtedly more difficult for digital currencies that are still in the early stages of development. Therefore, for the innovative research of digital currency, which is at the forefront of science and technology of the times, it is better to choose to continuously legislate and change the law to adapt to its own nature and change of situation than to ensure its normal operation through the way of multi-party cooperation and supervision[5]. The legal aspects of digital currencies have not been changed as of now. Legal aspects, digital currency as of now there is no clear definition of the legal attributes, in other words, although the digital currency in the practical application of the general understanding of virtual currency, but whether it belongs to the currency or commodities or something else, in the legal level does not give a clear definition, which also leads to the use of digital currency transactions, once the problem is difficult to reasonably determine how to deal with the incident in accordance with the provisions of the law[6]. This is also related to the fact that digital currencies have a lot of advantages. Of course, this is also related to the specificity of the legal characteristics of the digital currency, because the digital currency is ultimately a virtual currency and the emergence of a short period of time, China's current monetary legal system and its does not fit, the current legal provisions and regulations do not include it in the monetary category, difficult to have the space for digital currency[7]. In conclusion, the digital currency space is in dire need of expanding new regulators to implement cooperative regulation and improve the definition of the legal attributes of digital currencies themselves[8].

4.4. Relevance of Realizing New Economic Development

Digital currencies have many features such as decentralization, peer-to-peer delivery, payment as settlement, low cost, and convenience and speed, which can be summed up as low transaction cost, fast transaction speed and high anonymity. This is undoubtedly a breakthrough in transactions with huge advantages over traditional currencies. Therefore, the core practical significance of constantly plowing and researching in the field of digital currency is to utilize its own advantages to complement the traditional monetary system, serve the people's social life, and enhance the overall economic efficiency of China.

First, the application of digital currencies improves the convenience and transparency of commercial transactions, can reduce the high cost of traditional currency issuance and circulation, reduce the illegal behavior of commercial crimes, and enhance the ability of national central banks to control the market economy and commercial currencies. Second, it reduces transaction costs and increases the stability of the financial system. Digital currency realizes the decentralization of the transaction process through blockchain technology, significantly reduces the transaction cost and transaction time, and at the same time shares part of the settlement function of commercial banks, to a certain extent avoiding the concentration of credit risk in commercial banks and increasing the stability of the financial system. Third, promote the reform and upgrading of economic structure, the emergence of digital currency is the renewal of currency in the economic and financial fields, its convenient payment methods and very low transaction costs to promote the structural reform of the economic field, and the promotion of the digital RMB will also greatly help our country to improve economic efficiency.

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Fourth, increase the advantages of financial inclusion. Digital currencies allow all citizens to hold accounts with the central bank, and although this will somewhat increase the difficulty of regulation in the field of digital currencies, it greatly increases the coverage and convenience of financial services, which is conducive to promoting the transformation and upgrading of the mode of economic development[9].

Up to now, research in the field of digital currency has formed certain results in China, but it is still in the primary stage of digital currency research. Throughout the domestic research on the field of digital currency, most of them are the exploration of specific subject matter, and there are few systematic collation and research analysis of the literature published in this field, and the earliest of such few relevant studies can be traced back to 2 years ago. The data of this study is selected from the CNKI database of China Knowledge Network with a time span of nearly 10 years, and the literature comes from the core journals of Peking University, with a total of 1,068 pieces of literature data organized. From the point of view of research hotspots, China's research direction in the field of digital currency started from the earliest in Bitcoin to the combination of digital currency and blockchain technology to the research and development and promotion of the central bank's digital currency (digital RMB) and finally to the monetary policy and financial regulation in recent years, only more than a decade of time has experienced many research breakthroughs and iterations of the direction, indicating that China's development in the field of digital currency is extremely fast, but by the However, the current situation of monetary policy and regulatory means is still to be perfected, etc. It can be seen that China's digital currency field is still in the early stage of development, and the future direction of development mainly lies in the comprehensive promotion of digital RMB, research on legal attributes and policy norms, as well as research on the combination of the traditional monetary system to promote the country's economic and social benefits.

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