BibliometricAnalysisonCryptocurrency: Mappingfrom873 Publications

by Muhammad Aswad

Bibliometric Analysis on Cryptocurrency: Mapping from 873 Publications

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The development of the world economy, especially in Indonesia, cannot be separated from the elements of information technology. The development of information technology will relate to all fields, including the financial sector. Cryptocurrency is a series of cryptographic mechanisms in which there are transaction data and balance sheet data. Cryptocurrency is electronic data so that it does not have a physical form like money in general. There are two ways for someone to get cryptocurrency, namely by mining and/or trading. In Indonesia, most cryptocurrency users currently use their coins for investment, transaction, or payment purposes and remittances, making transfers to different countries. However, along with the increasing interest of the Indonesian people in investing in bitcoin, several obstacles can potentially reduce public interest in cryptocurrencies. This study aims to determine the development of cryptocurrency research trends published by leading journals. The analyzed data consisted of 873 indexed research publications. The data is then processed and analyzed using the VoS viewer application to find out the bibliometric map of cryptocurrency research development.

Keywords: Cryptocurrency; Bibliometrics; VoSViewer; Bitcoin

INTRODUCTION

The development of technology is currently running so fast. Digitization and automation give rise to various innovations in everyday life. The existing innovations can provide various conveniences in various sectors, one of which is in the financial sector. Financial institutions have begun to adopt various modern transaction facilities to provide better services to users of financial services (Addinanto, 2018).

The increasingly advanced and developing technology brings changes in payment methods. The latest innovation comes in the form of the emergence of cryptocurrency or commonly known as cryptocurrency (Addinanto, 2018). The level of development of cryptocurrency from year to year is considered quite significant. The development of one type of cryptocurrency that has the greatest value today, namely bitcoin, is not only rife abroad if the non-IT community can accept the technology and know its implementation technique, but it is also certain that the development of cryptocurrency in Indonesia will increase sharply. A recent report by Hootsuite estimated that nearly 30 million Indonesians own cryptocurrencies, a number that continues to grow. In Indonesia, most cryptocurrency users currently use their coins for investment, transaction, or payment purposes and remittances, making transfers to different countries. However, along with the increasing interest of the Indonesian people in investing in bitcoin, several obstacles can potentially reduce public interest in cryptocurrencies (Saputra, 2018).

The phenomenon of cryptocurrency is not only popular abroad. In Indonesia, cryptocurrency became popular in 2013. Many people increasingly recognize it. Based on TNS data on the wartaekonomi.co.id site, one of the world's leading research institutions that is part of Kantar, currently there are 63% of Indonesians with an age range of 20-50 years from the bottom to the top who know about cryptocurrencies. . More than half of Indonesians of working-age know this cryptocurrency phenomenon. Even DKI Jakarta is in the top 10, with the highest crypto capitalization in the world (Rosmayanti, 2018). The high capitalization is due to the relatively large number of cryptocurrency investors in Indonesia. Investors who own cryptocurrencies in Indonesia have beaten several other investment fields, namely stocks and mutual funds. In mid-November 2018, the number of stock investors reached 827,000 people, mutual funds reached 930,000 people (Almawadi, 2018), while cryptocurrencies reached 1.4 million people (Indodax, 2018).

There are two ways for a person to earn cryptocurrency, namely by mining and/or trading. Mining is the process of extracting cryptocurrencies using computational techniques. While trading is getting cryptocurrency by buying it in the online cryptocurrency market (Claraand Nurbaiti, 2018). Not only trading, but in Indonesia, some people get cryptocurrency by mining.

However, not as many as abroad, a community for cryptocurrency miners has begun to form in Indonesia. Cryptocurrency users who trade have two motives, namely as a means of payment and return on investment. However, in contrast to foreign countries that are freer to use cryptocurrency as a means of payment, cryptocurrency is only allowed as an investment tool or digital asset in Indonesia. Therefore, users who wish to use cryptocurrencies as a means of payment cannot do so in Indonesia. Payments can only be made for buying and selling transactions originating from abroad or when the person is in a country that allows cryptocurrencies. For users who use cryptocurrencies as an investment tool, the investment will be profitable if the price at the time of selling the cryptocurrency is higher than the purchase price (Septiani, 2019).

One of the biggest obstacles in Indonesia related to the development of cryptocurrencies is Bank Indonesia which has not recognized and even banned all transactions using bitcoin because bitcoin is not a legal tender in Indonesia. It can be seen from the official understanding of the Indonesian government regarding currency according to Article 1 Paragraph 1 of Law no. 7 of 2011, which states that "Currency is money issued by the Unitary State of the Republic of Indonesia, from now on referred to as Rupiah."

In addition to the above, other challenges must be faced in cryptocurrency investment, including (1) Cryptocurrencies do not have a clear classification. It cannot be ascertained that cryptocurrency is a currency or just a commodity. (2) The existence of a scam is an act of fraud that results in the shift of people's trust in something. For example, in Indonesia, people are used to persuasion to get rich quickly through an MLM or Multi-Level Marketing that is unclear and ultimately a scam. This is also what causes people to show skepticism about cryptocurrencies. (3) The general public's understanding of cryptocurrencies is still unclear, resulting in a lack of acceptance of cryptocurrencies in Indonesian society (Saputra, 2018).

LITERATURE REVIEW

The overly rigid versus flexible exchange rate debate has been going on for more than a century. Much of this stems from disagreements over which system would better allow countries to stabilize their unemployment and inflation rates at relatively low levels while enabling long-term sustainable growth and development. The responsibility of each country is to select the system that best suits its particular needs. Exchange rates can act as a damper that protects a country from unexpected economic, financial, social, and political crises originating from other parts of the world. Flexible exchange rate systems encourage countries to pursue independent monetary policies, while fixed exchange rates remove this power or force countries to impose controls that reduce trade and investment mobility. Therefore, the case in favor of

flexible exchange rates becomes very weak if empirical studies find that exchange rate fluctuations have a relatively weak impact on trade and investment flows or countries with independent monetary power tend to abuse this right by creating excessive inflation (Krugman 1991; Tavlas 1993; De Grauwe 1994, 2000).

Cryptocurrencies are defined as peer-to-peer transactions that facilitate the digital exchange of money (DeVries, 2016). The term "crypto" in Greek means secret or hidden. As the name implies, cryptocurrencies use a cryptographic mechanism that stores all transaction and balance data. Li and Wang (2016) explain that cryptocurrency is developing a digital financial system composed of cryptological computing and a decentralized system. According to Kumar and Smith (2017), cryptocurrency is a series of cryptographic mechanisms in which there are transaction data and balance sheet data. Cryptocurrency is electronic data so that it does not have a physical form like money in general.

Like conventional currencies, cryptocurrency also functions as a means of payment between internet network users (Abramova and Bohme, 2016). Cryptocurrency can facilitate transactions between users or peer to peer without an intermediary institution. This system can be formed because of a protocol that stores all transaction data and balances of each user or is referred to as a blockchain.

One type of cryptocurrency that has been launched and is widely known is bitcoin. In 2008 bitcoin was introduced by a person or group calling themselves Satoshi Nakamoto. The concept of bitcoin was created as a payment system that connects internet-based users. Practical transactions and the ability to reduce dependence on financial intermediaries made bitcoin an innovation in payment technology at that time (Polasik et al., 2015).

The use of cryptocurrencies has several advantages. First, transactions are carried out directly from the paying party to the recipient. Second, the role of intermediary institutions can be reduced due to the digital nature of transactions. Third, the advantages of decentralization given in cryptocurrencies are considered more practical, cost-effective, and not tied to bank regulations (Dibrova, 2016).

The impact of using virtual money or cryptocurrency on the Indonesian economy should not be underestimated. At present, they are considering that the largest countries that allow the use of virtual money have great economic ties to Indonesia. The current condition of the decline in the value of virtual money needs to be watched out for. This is because it has the potential to affect the domestic economy. The biggest user countries are Japan and Korea. If they experience a crisis in their currency due to cryptocurrency, Indonesia has the opportunity to be affected (Saputra, 2018).

The transmission of the impact of the crisis caused by cryptocurrencies is indeed long, even far away. Among the indications, the market capitalization of cryptocurrencies is very small compared to stock indices, such as the Jakarta Composite Index (JCI), South Korea Stock Exchange (KRX), and the Tokyo Stock Exchange (JPX). From the statistics shown by Bitcoinity.org as of 5 February 2018, the cryptocurrency market capitalization was US$153.36 billion as of 4 February 2018. Meanwhile, the market cap for JPX was US$5.12 trillion, KRX was US$1.33 trillion, and JCI was Rp7,390,39 trillion. The most important thing to observe is the dangers of virtual money, both from its function as a means of payment and a commodity (Yohandi, 2017).

Bank Indonesia (BI) again reminded bitcoin users or bitcoin owners in Indonesia to stop using or investing in virtual currency. The Head of the BI Payment System Policy Department said that the higher circulation and volatility of the bitcoin exchange rate would endanger the stability of the monetary, financial system, and payment system in Indonesia.

In terms of financial system stability, BI is also concerned about bitcoin's volatility. This is the same as the theory of gravity. If the ball is raised very high, it will hurt when it falls. We don't want the crisis to repeat itself because there is a bubble. So suddenly, if a crisis occurs, it is the community that will suffer.

In addition, there is also the risk of regulatory arbitrage because transactions can be carried out from other countries with more accommodating provisions. In more detail, the most dangerous factor is the process of creating Bitcoin as a currency or transaction tool that is considered excessive, both in terms of nominal and agreed on price values, especially in the description of the economic crisis. As the birthplace of Bitcoin, Blockchain technology is one of the government's opportunities to compete with other countries. Others in terms of technological innovation. We are already out of date with the internet, don't miss out on the next technology (Saputra, 2018).

RESEARCH METHODS

This study uses data on publications of papers sourced from various journals from 2011-2021 with research on cryptocurrency. Data collection is done through searching for articles indexed by the Google Scholar database. The search is carried out by typing the keyword 'cryptocurrency,' then selected papers relevant to the theme of cryptocurrency research for journal criteria filtered and processed in software indexed by Scopus only journals equipped with DOI. From the search results, there are 873 articles published from 2011-2021. Data in the form of topics used in the publication of crypto currency-themed papers and analyzed using Microsoft Excel 2010. The trend of publication developments on the cryptocurrency theme was analyzed using VOSViewer software.
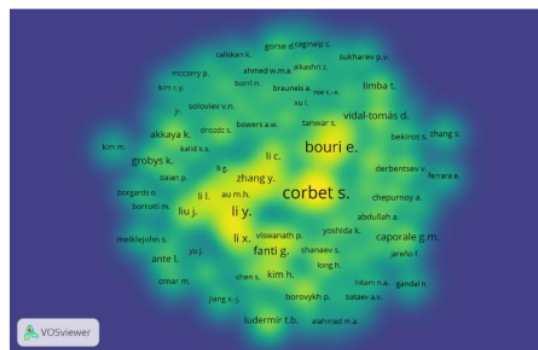
The computer program that was introduced was called VOSviewer. VOSviewer is a program developed for creating and viewing bibliometric maps. This

program is available free of charge to the bibliometric research community (see www.vosviewer.com). VOSviewer can create author maps or journals based on co-citation data or create keyword maps based on shared incident data. In addition, the program offers a viewer that allows bibliometric maps to be examined in detail.

To build the map, VOSviewer uses the VOS mapping technique, where VOS stands for visualization similarity. For previous studies where the VOS mapping technique was used. VOSviewer can display maps constructed using appropriate mapping techniques. Therefore, this program can display maps built using the VOS mapping technique and display maps built using multidimensional scaling techniques. VOSviewer runs on many hardware and operating system platforms and can be started directly from the internet.

RESULTS AND DISCUSSION

The following is a table that shows a collection of documents used in research with the theme of cryptocurrency in Islamic economic research. Of the total 873 documents used, they are divided into 4 types of documents, including journal articles (599 documents), anthology/book chapters (45 documents), Conference Papers (206 documents), and Reviews (23 documents).

Table 1: Document Types

No	Document Types	Number of Articles
1	Journal article	599
2	Book chapter	45
3	Conference Paper	206
4	Review	23
	TOTAL	873

Based on the results of the grouping of document types above, the type of document most widely used as research subjects with the theme of cryptocurrency is documents in the form of Journal articles with a percentage of 68.61% or as many as 599 documents. Meanwhile, the least used documents are in the form of a review of 2.63% or as many as 23 documents. This shows that the references used are quite valid because most of them come from documents in scientific journals.

Bibliometric Graph Analysis

Bibliometrics is based on the calculation and statistical analysis of scientific outputs in articles, publications, citations, patents, and other more complex indicators. It is an important tool in evaluating research, laboratory and scientist activities and scientific specialization, and country performance. After establishing the background for bibliometric development, the report presents the database from which the bibliometric was created and the main indicators.

A visual mapping chart from 873 cryptocurrency journals will be presented to explore the meta-analysis results in this section. The results of the keyword mapping analysis become the basis for mapping together important or unique terms contained in certain articles. Mapping is a process that enables one to recognize elements of knowledge and their configuration, dynamics, interdependencies, and interactions.

Related to bibliometrics, science mapping is a method of visualizing the field of science. This visualization is done by making a landscape map that can display topics from science (Royani et al., 2013). The results of the network visualization of 873-word map journals with the cryptocurrency theme can be seen:

Co-Authorship Analysis

Furthermore, the bibliometric results will be displayed based on the sub-themes, namely authors, organizations, and countries.

1. Co-authorshipAuthors

Using the VOSViewer software, we found the author's bibliometric mapping, as shown in the following figure. The bigger the shape and the brighter the color, the more the author is publishing his writings related to cryptocurrencies.

Figure 1: Co-authorshipAuthors

The appearance of cluster density depends on the level of yellow light brightness. This identifies that the yellow color on the map depends on the number of items associated with other items. This section is useful for getting an idea of the general structure of a bibliometric map by paying attention to which parts of the light are considered important to analyze. From the map, it is possible to interpret the authors who have published the most.

In general, each researcher has different tendencies. Some writers are indexed as a single author, others co-author with other researchers so that multiple clusters appear, which are indicated with different densities. However, the authors with a fairly large density indicate that they publish more research on

cryptocurrency themes than those with a lower density, so this result can be used to reference future researchers. Based on these results, the bigger and brighter the author's name, the more papers he published. The author of the most published publications related to the theme of cryptocurrency based on bibliometric mapping, namely Corbet S.

2. Co-authorship Institution (Co-citation)

In bibliometric analysis, the author's institution can be seen from which institution they come from. Through these results, we were able to interpret the institutions that wrote the most publications.

Figure 2: Co-authorship Institution (Co-citation)

Based on the following image, the cluster of visible institutions with glowing circles shows how productively these institutions have contributed to publishing cryptocurrency-themed papers. The largest number of institutions is calculated from the number of publications and links to other institutions, where an author can write many papers in different journals.

The most popular institutions are calculated based on the number of publications and links to other institutions, where a paper writer can write many papers in different journals. The most well-known ranking of institutions shown by the results of bibliometric mapping is Trinity Business School, Trinity College Dublin, Dublin 2, Ireland.

3. Co-authorship Country

Furthermore, the visualization of the journal publisher mapping is illustrated in the bibliometric image of the journal source below. Based on the picture, it can be seen that several clusters of countries appear to publish the most articles with the theme of cryptocurrency.

Figure 3: Co-authorship Country

Based on the picture above, the larger the circle of the publishing country, the more papers that country publishes. Seen that the United States has the brightest light. This means that the United States publishes the most cryptocurrency-themed papers compared to other countries.

Co-occurrence Analysis

Furthermore, the bibliometric results will be displayed based on the sub-themes, namely all keywords, author keywords, and index keywords.

1. Co-occurrence All Key Word

VOSViewer can also find a bibliometric mapping of the most used keywords in cryptocurrency themes related to Islamic economics. The bibliometric mapping of the keywords used can be seen in the image below. Keywords that have a larger form indicate that the word is used more in journals related to cryptocurrency.

Figure 4: Co-occurrence All Key Word

This data can be used to find out the trend of keywords in recent times. The bibliometric analysis shows several widely used keywords in the paper that are the object of research. The more keywords that appear, the wider the circle indication will be. While the line relationship between keywords shows how much they are related to other keywords.

Based on the analysis results using VOSviewer on cryptocurrency-themed keywords, many clusters are interrelated with other keywords. Keywords that have
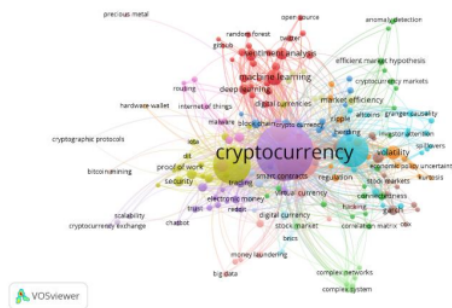
the same color indicate a very close relationship. The most widely used keyword in cryptocurrency-themed journals is cryptocurrency.

2. Co-occurrence Authors Key Word

VOSViewer can also find a bibliometric mapping of the keywords most used by authors in cryptocurrency themes related to Islamic economics. The bibliometric mapping of the keywords used can be seen in the image below. Keywords with a larger form indicate that the word is used more by authors in journals related to cryptocurrency.

Figure 5: Co-occurrence Authors Key Word

Based on the analysis results using VOSviewer on keywords that authors widely use in cryptocurrency-themed journals, many clusters are interrelated with other keywords. Keywords that have the same color indicate a very close relationship. The most widely used keyword by the author is cryptocurrency.

3. Co-occurrence Index

Then, this study also obtained results in the form of an index that is often used by authors and is interrelated in the theme of cryptocurrency-related to Islamic economics, as shown in the image below. An index that has the same color indicates a very close relationship.

Figure 6: Co-occurrence Index
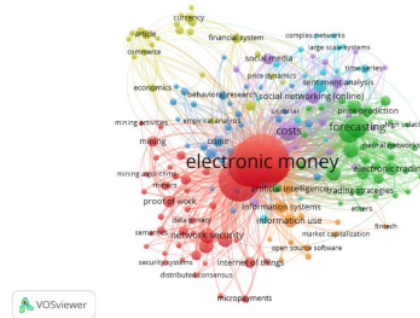
Based on the results obtained, the lighter the color, the more recent the index is used. Thus, for example, in the word index of cryptocurrency-themed papers related to Islamic economics, there are some of the most widely used words, namely Electronic Money. The following is a summary table related to research and studies on the topic of cryptocurrency.

Table 2: Summary of findings

Rank	Keyword by Occurrence	Authors with The Highest Publication	An institution with The Highest Publication
1.	Cryptocurrency	Corbet S.	Trinity Business School, Trinity College Dublin, Dublin 2, Ireland.
2.	Bitcoin	Bouri E.	DCU Business School, Dublin City University, Dublin 9, Ireland.
3.	Electronic Money	Lucey B.	Institute of Business Research, University of Economics Ho Chi Minh City, Ho Chi Minh City, Viet Nam.
4.	Blockchain	Zhang W.	USEK Business School, Holy Spirit University of Kaslik, Jounieh, Lebanon.
5.	Cryptocurrencies	Li Y.	University College London, London, United Kingdom.
6.	Ethereum	Li X.	Institute for Policy Research, University of Bath, United Kingdom.
7.	Forecasting	Roubaud D.	University of Sydney Business School, Sydney, New South Wales, Australia.
8.	Machine Learning	Vo X.V	School of Accounting, Finance, and Economics, University of Waikato, New Zealand.
9.	Investments	Fanti G.	Centro de Informática, Universidade Federal de Pernambuco, Av. Luiz Freire s/n, Recife, PE 50670-901, Brazil.
10.	Costs	Miller A.	Sumy State University, Ukraine.

Most cited articles with Keyword Cryptocurrency

Table 3: Most cited articles on cryptocurrency studies

Rank	Title	Author	Year	Journal	Total
1.	Hyperledger Fabric: A Distributed Operating System for Permissioned Blockchains	Androulaki, E., Barger, A., Bortnikov, V., (...), Cocco, S.W., Yellick, J.	2018	Proceedings of the 13th EuroSys Conference, EuroSys 2018 2018-January	727
2.	Where is current research on Blockchain technology? - A systematic review	Yli-Huumo, J., Ko, D., Choi, S., Park, S., Smolander, K.	2016	PLoS ONE 11(10),e0163477	707
3.	Blockchain challenges and opportunities: A survey	Zheng, Z., Xie, S., Dai, H.-N., Chen, X., Wang, H.	2018	International Journal of Web and Grid Services 14(4), pp. 352-375	690
4.	The Bitcoin backbone protocol: Analysis and applications	Garay, J., Kiayias, A., Leonardos, N.	2015	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics) 9057, pp. 281-310	459
5.	The majority is not enough: Bitcoin mining is vulnerable	Eyal, I., Sirer, E.G.	2014	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics) 8437, pp. 436-454	422
6.	The inefficiency of Bitcoin	Urquhart, A.	2016	Economics Letters 148, pp. 80-82	421
7.	Algorand: Scaling Byzantine Agreements for Cryptocurrencies	Gilad, Y., Hemo, R., Micali, S., Vlachos, G., Zeldovich, N.	2017	SOSP 2017 - Proceedings of the 26th ACM Symposium on Operating Systems Principles, pp. 51-68	373
8.	The quest for scalable blockchain fabric: Proof-of-work vs. BFT replication	Vukolić, M.	2016	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics) 9591, pp. 112-125	353
9.	On the hedge and safe haven properties of Bitcoin: Is it more than a diversifier?	Bouri, E., Molnár, P., Azzi, G., Roubaud, D., Hagfors, L.I.	2017	Finance Research Letters 20, pp. 192-198	334
10.	A Review on the Use of Blockchain for the Internet of Things	Fernández-Caramés, T.M., Fraga-Lamas, P.	2018	IEEE Access 6, pp. 32979-33001	333

The articles above are the 10 most cited articles related to Cryptocurrencies. The first article, namely Hyperledger Fabric: A Distributed Operating System for Permissioned Blockchains (Androulaki et al., 2018), was the most cited 727 times. This article is about Fabric, its architecture, as a reason for various design decisions, the most prominent implementation aspects, and the distributed application programming model. Fabric is further evaluated by practicing and equating Bitcoin-driven digital currency. It also features that Fabric achieves end-to-end over 3500 transactions per second

in certain popular execution configurations, with sub-second latency, good scaling to over 100 peers.

The article that ranks second is Where is current research on Blockchain technology? - A systematic review (Yli-Huumo et al., 2016) is an article cited 707 times. This article is about the challenges and future directions regarding Blockchain technology from a technical perspective. Extracted from 41 major papers in scientific databases. The results show that more than 80% of papers focus on Bitcoin systems, and less than

20% deal with other Blockchain applications, including, e.g., smart contracts and licenses.

The article that is in third place, namely Blockchain challenges and opportunities: A survey (Zheng, Z et al. 2018), is an article that was quoted 690 times. This article is about. Blockchain taxonomy introduces typical blockchain consensus algorithms, reviews blockchain applications, and discusses technical challenges and recent advances in overcoming those challenges. Apart from that, this article also shows the future direction of blockchain technology.

The fourth article, The Bitcoin backbone protocol: Analysis and applications (Garay J et al. 2016), is a book that has been cited 459 times. The book describes and analyzes the Bitcoin system and the more complicated Byzantine agreement (BA) protocol, proving it is secure assuming high network synchronicity. The adversary's hashing power is less than 1/2, while the adversarial limit required for security decreases as the network does not sync.

The article in fifth place, the majority is not enough: Bitcoin mining is vulnerable (Eyal I., & Sirer, E.G., 2014), is an article that was quoted 422 times. This article is about Bitcoin Cryptocurrency, which records transactions in a public log called a blockchain. The security of the blockchain depends on the distributed protocol, which the miners run.

The article that ranks sixth, namely The inefficiency of Bitcoin (Urquhart, 2016), is an article that was quoted 421 times. This article deals with the skepticism and lack of understanding of cryptocurrencies and adds to some of the Bitcoin literature and Bitcoin market efficiency.

The article in seventh place, namely Algorand: Scaling Byzantine Agreements for Cryptocurrencies (Gilad et al., 2017), is an article that was cited 373 times. This article is about algorithms, which are new cryptocurrencies that confirm transactions with latency on the order of one minute while scaling to multiple users. In this article, Algorand's performance is implemented and evaluated on 1,000 EC2 virtual machines and simulated up to 500 thousand users.

The article that ranks eighth is The quest for scalable blockchain fabric: Proof-of-work vs. BFT replication (Vukolić M. 2016), is an article cited 353 times. This article compares PoW-based blockchains with those based on BFT state machine replication, focusing on their scalability limits. It also discusses overcoming these scalability limits and outlines the major open issues outstanding in searching for the "ultimate" blockchain structure.

The article that ranks ninth is On the hedge and safe haven properties of Bitcoin: Is it more than a diversifier? (Bouri et al., 2017), is an article cited 334 times? This article uses a dynamic conditional correlation model to examine whether Bitcoin can act as a hedge and safe haven for the world's major stock indices, bonds, oil, gold, general commodity indices, and the US dollar index. The data used in this article is the daily, and weekly data range from July 2011 to December 2015.

The article that ranks tenth, namely A Review on the Use of Blockchain for the Internet of Things (T. M. Fernández-Caramés, & P. Fraga-Lamas, 2018), is an article cited 33 times. This article provides a comprehensive overview of how to adapt blockchain to IoT-specific needs to develop Blockchain-based IoT (BIoT) applications. After explaining the fundamentals of blockchain, the most relevant BIoT applications are described to emphasize how blockchain can impact traditional cloud-centric IoT applications. Then, the current challenges and optimization possibilities are detailed regarding the many aspects that affect the design, development, and deployment of BIoT applications.

CONCLUSION

This research aims to find out the extent of the development of Islamic finance to find out how many journals are written with the theme of cryptocurrency. The results show that there has been an increase in the number of cryptocurrency-themed publication articles since 2011. Cryptocurrency research has been carried out in various countries. An increase in the cryptocurrency score in a country will positively relate to economic growth in that country, making economists research cryptocurrencies. Based on research using the bibliometric method, it was found that Corbet S. wrote the most about cryptocurrencies. The institution that publishes the most cryptocurrency-related papers in Trinity Business School, Trinity College Dublin, Dublin 2, Ireland. And the country that publishes the most cryptocurrency-related papers is the United States. All the keywords and keywords that authors most widely use in cryptocurrency-themed journals are cryptocurrency. And the word Electronic Money is the word most used in cryptocurrency-themed index papers.

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