

DOES BLOCKCHAIN BREAK DOWN OR TRANSFORM THE ISLAMIC FINANCIAL SYSTEM?

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Abstract: *This research discusses blockchain in financial technology (Fintech), and whether it has the potential to break down or transform the Islamic financial system. This research aims to explain blockchain in Fintech and understand the challenges it poses to the Islamic financial system. This topic is important to understand how big the development of global Fintech is towards the Islamic financial system. Particularly, it is still being discussed by the world community such as policymakers, practitioners, researchers, and scholars. As it causes a dilemma for the Islamic financial system because there are various opinions regarding haram and halal of it. On several occasions, the blockchain has driven transformations in the Islamic economic and financial system but on the other, it has also been broken down. Our study shows that blockchain deserves further attention and study to unfold whether it is halal or haram according to Islamic finance law. This study will analyze in depth the debate regarding the topic using the concept of financial technology and the principles of Islamic finance. This study uses an integrative reflection method with non-experimental data and uses an unstructured research strategy. The legal framework for Islamic finance is researched and studied to determine if it can accommodate the rapidly evolving Fintech.*

Keywords: *Financial Technology, Blockchain, Islamic Financial System*

Introduction

Technological advances in intelligent network systems introduce sustainable frameworks that meet the demands of the industrial revolution (Uddin, et al., 2023). Technological advances encourage adjustments in various sectors, especially in the field of finance, especially towards the Islamic financial system. The development of economic and financial digitalization is still causing difficulties for many countries, even countries with liberal and open economic systems. The transformation of the digital economy is driven by the presence of the Covid-19 pandemic so that almost all sectors of the world's economy, business and finance are experiencing rapid transformation. In the aftermath of the Covid-19 pandemic, digitization changed the rules of competition between world businesses, finding new models regulated by digital platforms and digital technology-based business ecosystems (Soto-Acosta 2020). Digital economy transformation involves leveraging technology to enable large business increases and create new business models (Piccinini, Hanelt, Gregory, & Kolbe, 2015).

The development of remote business interactions and financial technology systems as well as the emergence of types of cryptocurrency digital currencies have become a challenge for the world's economy that continues to grow. The digitalization of the world economy is demonstrated by the presence of financial technology. The development of fintech is a necessity that cannot be avoided in the Islamic finance industry (Hui, Manaf, & Shakri, 2019).

The problem faced by many Islamic countries including Indonesia is building a legal framework in the Islamic fintech (i-fintech) sector to ensure that the system is halal and haram from an Islamic finance perspective (Muryanto, Kharisma, & Nugraheni, 2022). Fintech is one of the most significant innovations in the financial industry driven by the sharing economy, information technology and favorable regulations (Boratynska, 2019). Fintech is bringing change to all types of banking, asset and wealth management, provision of funds and payments, exchanges, brokerage and insurance. Fintech changes the dynamics of the industry as a whole, causing changes in the competitive structure and ecosystem of financial services (Deloitte, 2016).

Fitntech accelerates the development of Islamic finance through digital technology that is compatible with sharia law (Alblooshi, 2022). One of the fintech that has significant development is blockchain. Blockchain is a financial technology that provides a digital value transfer platform without relying on third parties. The existence of clear information available in blockchain technology platforms supports user knowledge (Xie & Zhang, 2023). Blockchain technology integrates key technologies such as distributed storage, smart contracts, cryptographs, solution mechanisms that design rights and information protection for the user community (George, Peterson, Yaros, Beam, Dibbell, & Moore, 2019). Blockchain supports developing countries and is able to solve the problem of Islamic social finance data which is the main problem in the development of zakat or waqif and Nadzir in waqf (Tamanni, Indra, Syamlan, & Priantina, 2022). Blockchain technology encourages increased use and adaptation of Islamic finance to changes in global finance. On the other hand, blockchain has a negative impact because the risk of blockchain transactions creates uncertainty that violates the principles of the Islamic financial system. Blockchain is used as a transaction platform for gambling, drugs, money laundering and others. However, currently there is a governance that controls money laundering in blockchain known as Travel Rules.

Thus, with all the prospects that blockchain financial technology has, will it damage sharia economic values/undermine the Islamic economic system or even encourage transformation in the Islamic financial system which does not violate sharia law?

Literature Review

There are two points that will be discussed in Literature Review, Fintech Adoption and Digitalization in Islamic Banking; and Digital Currencies Technologies in Islamic Finance. A discussion about Islamic finance and digitalization must include if we talk about Islamic Financial system. Islamic finance is a younger and more dynamic ecosystem than conventional finance. This fact opens the door for higher chances of innovation in Islamic Financial System as stated before. So, we need to understand the adoption of Fintech in Islamic banks. This adoption requires particular attention especially since banking has experienced rapid change, and technology has become a survival must for all banks in the last two to three decades. Their changes put technologies such as AI, machine learning, big data, mobile internet, blockchain, and other technologies at the heart. As Aysan et al. did research to identify FinTech strategies in Islamic banks. They collected data from 60 Islamic banks operating in 18 countries and analyzed their financial statements, annual reports, and website. The data shows that Islamic banks are indeed adopting fintech strategies, but their level of engagement varies across

different regions. Islamic banks in Southeast Asia tend to be more active in adopting Islamic FinTech than those in the Middle East and North Africa region.

This adoption is to enhance customer experience, increase efficiency, and reduce costs. However, most Islamic banks are performing stagnant at utilizing these technologies, except for mobile banking. The main reason for this technicality is that the mobile banking infrastructure is widely used; however, other technologies mentioned here require significant R&D and infrastructure investment. It shows the adoption is still in its early stages and there is room for improvement in terms of innovation and scalability. These banks also focused on developing their own fintech solutions rather than partnering with fintech firms. To support this argument (Aysan & et.al., 2022). Aysan and Unal also concluded that Islamic finance is indeed evolving into fintech and blockchain, and this trend is likely to continue in the future as these technologies offer new opportunities for innovation and growth in the industry. Both researches explain that Islamic banks are adopting fintech strategies to remain competitive in the rapidly evolving financial industry. Islamic banks to increase their engagement with fintech and accelerate their innovation and growth in the industry (Aysan & Unal, 2021). The importance of digital currency technologies in Islamic Finance is growing today. Blockchain technology has gained significant attention in the past decade due to its ability to overcome a critical technicality in human nature - the need for trust. And it also could be merged with almost any other technology because of its flexibility.

Rabbani explores the intersection of three emerging trends in the financial industry: FinTech, blockchain technology, and Islamic finance. FinTech innovations, such as mobile banking and online payments, can improve access to financial services for any transaction worldwide. Particularly those living in remote areas. Blockchain technology can enhance the transparency, security, and efficiency of Islamic finance transactions, such as sukuk (Islamic bonds) and takaful (Islamic insurance) by eliminating intermediaries and reducing the risk of fraud or errors. So Blockchain is an effective way to expand the range of Shariah-compliant financial products available to customers. Blockchain technology is based on a decentralized ledger for recording activities; thus, none of the included parties are trusted more than the others (Rabbani, 2020). Lacasse et. al. also explain that In the Islamic finance world, more advanced technologies are adopted by younger fintech and start-ups, and later they are merged or acquired by larger institutions or banks. Using blockchain would help ensure the transparency of all parties in Islamic banks, including shariah boards, beneficiaries, regulators, and management. The implementation would require a collaborative effort between professionals with expertise in finance, technology, and Shariah law. It would also require continuous communication and coordination among the different sectors involved to ensure the standardization and customization of the smart contracts meet Shariah-compliant standards (Lacasse, Lambert, & Khan, 2018).

Indeed, the literature discussed two main points on the Fintech development. The first is the transformation of the banks financial system and the utility of digital currency in this decade. Moreover, fintech is still a very young but rapidly evolving and fast-moving industry. Therefore, blockchain-based techniques can and should be used in Islamic finance transactions, increasing global trust in Islamic finance at this critical stage. So, it is important to examine the

potential use of blockchain in the Islamic financial system as it encourages transparency and honesty in all dealings.

Method

This study uses a qualitative research method to explore perceptions of Blockchain Fintech towards the Islamic financial system. The qualitative methods provide in-depth information about a particular phenomenon (Crasswell & Clark, 2018). This method is used to reflect views on blockchain and Islamic finance as relatively new research subjects. Therefore, this method can explain whether the adoption of blockchain in the integration of the Islamic financial system can support or actually change the Islamic economic system indirectly.

The data used in this study are secondary data obtained from credible journals, books, scientific reports, and websites. The data search strategy uses an unstructured system with the keywords "financial technology" "blockchain" and "Islamic finance system and blockchain".

Result and Discussion

Blockchain and Islamic Finance

The Islamic Finance sector at the global level consists of Islamic banks (including commercial and investment banks), non-bank financial institutions (such as investment and fund management companies), insurance providers (takaful), capital markets (including stock markets and sukuk) and infrastructure institutions such as rating agencies and organizations to establish accounting and regulatory standards, and others. The difference between Islamic Finance and conventional systems is that the transparency of various types of institutions has pros and cons that support the selection of financial contracts made by individual investors. This, in turn, affects the nature and composition of contracts at the systemic level (Iqbal, *Advances in Islamic Economics and Finance*, 2007).

Islamic Finance and its digital economy offer opportunities for Muslims and non-Muslims as people search for solutions to their pressing problems. Some technologists imagine this world without intermediaries, while others want faster and more efficient transacting (Elasrag, 2019). The future of Islamic Finance, especially Islamic FinTech, is very good in Muslim countries. The development of mobile phones and smartphones has paved the way for the growth of FinTech in these countries. Of course, these opportunities are not without challenges. The biggest challenges for Sharia FinTech companies are regulation and the need for excellent and authentic research in the Sharia Fintech sector (Rabbani, 2020).

The digital economy, including Blockchain, is an essential topic in economic studies, including Islamic FinTech. Islamic FinTech has a significant base of trust and transparency. There are several critical points in how Islamic FinTech views Blockchain as one of the chains of the digital economy. There are three basic principles of Islamic FinTech, namely the Prohibition of *riba*, the Prohibition of *gharar*, and the Prohibition of *maysir* (gambling). These three are the basis for assuming the critical point of whether Blockchain transforms or breaks down Islamic FinTech (Iqbal, *Thirty Years of Islamic Banking: History, Performance and Prospects*, 2005).

According to Munawar Iqbal in 'Thirty Years of Islamic Banking: History, Performance and Prospects,' The First policy of Islamic FinTech is the Prohibition of *riba*. *Usury* can be defined as everything (large or small), in the form of money or non-money, exceeding the loan principal that must be paid by the borrower to the lender along with the loan principal due to the extension of maturity. The concept of conventional banking, for example, enforces usury as the most effective source of profit for borrowers. Blockchain is considered to transform Islamic FinTech, who want to avoid bank usury or third parties. One example of a critical point of wages for miners (miners) is usury or reward. The encryption result code (hash) in the Blockchain is like a fingerprint so that miners are considered worthy of getting wages from the results of their work in finding special codes. While the rejection side is present because it is considered that this wage system is the same as paying a third party, and the search for a unique code relies on luck (Rabbani, 2020). Research in 2020 found that Islamic FinTech organizations should be regarded as partners by Islamic Financial Institutions (IFIS) rather than enemies. IFIs want to improve efficiency, transparency, and customer satisfaction. They must adopt FinTech and become partners of FinTech companies. Moreover, if we ignore its legality, the Blockchain-based monitoring process can be a valuable tool in Sharia FinTech. Smart contract transactions can create a record of ownership and assets, and these transactions cannot be changed and tracked (Rabbani, 2020). The second basis is the Prohibition of *Gharar*. *Gharar* refers to actions and conditions in exchanging a contract, the full implications of which are not known to the parties and are detrimental to one of the parties. However, it is impossible to disclose all the information, not because the seller wants to hide anything, but because it is the subject of the contract. In the case of Blockchain, the negative assessment of Blockchain is because it has a high uncertainty in terms of unique code. In addition, code mining or (mining) is a critical point of transparency in Islamic FinTech.

However, on the other hand, the storage (cloud) is distributed to each individual to store all data and information from Islamic institutions safely. Blockchain, a distributed ledger technology in the bitcoin cryptocurrency, provides a new approach to verifying and validating transactions. The Blockchain mechanism makes it difficult to change the recorded data written on the block. Because blocks are distributed and linked to previous blocks, data changes to existing blocks require majority consensus from participating nodes (Al-Wosabi, 2018), so this complex security without third parties is a heavy point of Blockchain transformation in Islamic FinTech.

Third, Islamic FinTech prohibits the act of *Maysir* (gambling). Islam prohibits all kinds of gambling and games of chance. It is based on explicit texts in the Qur'an. However, it is essential to distinguish between games of pure chance and involving elements of chance and risk-taking. Not all types of risk-taking are prohibited. There are three types of risk. First, there is a risk that can be referred to as entrepreneurial risk and is permissible in Islam. The second type of risk is part of life, such as natural disasters and calamities. The third type of risk arises from uncertainty not part of everyday life. Incidentally, the game is not necessary, which is gambling. Islam prohibits the third type. In the case of Blockchain, the tipping point is cryptocurrency and bitcoin as a reward for miners (miners) who were able to find a unique code. This bitcoin reward is rated negatively because it contains an element of uncertainty and,

at some point, relies on luck to intersect with the assumption of gambling (Iqbal, *Advances in Islamic Economics and Finance*, 2007).

Table 1: The Critical Point of Blockchain Transformation or Breakdown of Islamic Finance

Blockchain is Transforming Islamic Finance		Blockchain Breakdown Islamic Finance	
1	Blockchain minimizes the role of third parties. Blockchain avoids third parties' interest, speculation, and uncertainty, usually set by banks and the state.	1	Blockchain has high uncertainty when it comes to custom code. Code mining or (mining) becomes a critical point of transparency in Islamic Finance.
2	Cloud storage is distributed to store all data and information from Islamic institutions.	2	Cryptocurrencies and bitcoin have no physical assets and no medium of exchange. However, some scholars are still debating if, in the future, there will be physical assets from bitcoin.
3	A unique code reinforces the security of cryptocurrencies in the blockchain network.	3	The tipping point cryptocurrency in the form of bitcoin is a reward for miners (miners) who were able to find a unique code. This bitcoin reward is rated negatively because it contains an element of uncertainty and, at some point, relies on luck to intersect with the assumption of gambling.
4	The encryption result code (hash) in the Blockchain is like a fingerprint so that miners are considered worthy of getting wages from the results of their work in finding special codes.	4	Islamic FinTech still needs a regulatory framework and regulators to regulate the global Islamic economy.

Source: (Elasrag, 2019)

Blockchain in Islamic Financial Law

The existence of blockchain in supporting digital economic and financial systems is still a pro and contra in the Islamic financial system. Blockchain is automatically controlled by technology that does not directly show the existence of third parties but other interpretations arise (Xie & Zhang, 2023). The presence of third parties cannot be eliminated because the blockchain platform still depends on validators who are blockchain developers who function as third parties in the transaction chain (Busari & Aminu, 2022). However, blockchain developers are open source and there is no main developer (Dermawan, 2022). Blockchain affects Islamic finance with different financial legal regulations for each country, especially regarding transactions between countries with different financial systems. Currently bitcoin and cryptocurrency transactions in the blockchain technology system have governance rules called Travel Rules to prevent money laundering even though transactions are borderless. On

the other hand, the challenge of blockchain implementation in Islamic finance law is the complexity of Islamic finance with its unclear implementation and regulatory standards in blockchain, which creates a dilemma in ensuring that blockchain complies with Islamic legal standards (Alaeddin, Dakash, & Azrak, 2021). Even though the existence and development of the world's financial technology system is increasingly digital.

Basically, the Islamic financial system has difficulty integrating financial principles based on Islamic law with the existing system. The Islamic financial system must be able to design an inclusive financial system as a response to the risks posed by financial technology or blockchain in the Islamic financial system (Miskam, Yaacob, & Rosman, 2019). Blockchain technology in particular has changed the regulation of the Islamic financial system to become Islamic Fintech. The existence of blockchain and various other types of digital financial technology is a necessity that is no longer an option to be used or not used. The push of the Covid-19 pandemic to change the digitalization of the world is very massive. So that Islamic finance must be able to integrate with various existing global financial systems including blockchain.

There are many differences of opinion that digital finance is considered a financial system that is not in accordance with Islamic law. Digital money such as bitcoins and cryptocurrencies that transact through blockchain technology are considered haram in Islam. However, on the other hand, there is also an opinion that bitcoin is a valid currency from an Islamic perspective because the risk (*khatar*) posed by bitcoin does not invalidate the contract from a sharia perspective (Hanafi & Rahman, 2019). Cryptocurrency is a digital currency that operates on a blockchain platform with a financial system without a designated central bank (Abubakar, Hassan, & Haruna, 2019). The operationalization of cryptocurrencies and bitcoins is carried out through blockchain technology. The phenomenon of the emergence of world financial technology systems, especially blockchain, has caused controversy regarding the compatibility of digital currencies in Islamic economic law. The existence of blockchain technology with cryptocurrency and bitcoin that is consistent with the development of Islamic finance. Some argue that cryptocurrencies have differences in settlement with Islamic contracts.

Advances in blockchain technology where financial technology innovations emerge by combining the Internet of Thing (IoT), social networking services, social media, Artificial Intelligence (AI) and big data analytics. Technological advances form a new landscape for the Islamic financial system which is considered to provide opportunities for efficiency and effectiveness in the management of the Islamic financial system. Meanwhile, on the other hand, it also poses a challenge to the Islamic financial system because the method is risky and considered contrary to the Islamic financial system (Miskam, Yaacob, & Rosman, 2019). Bitcoin is a single-use form of blockchain because it provides direct value to users as an alternative method of payment. Meanwhile, Cryptocurrency or cyptoken is a form of a new business model that replaces payment systems (Lee, 2019). Blockchain as a technology used in bitcoin and other digital currency transactions through a distributed payment system. Blockchain automates contractual rules regarding payments and ownership transfers, enabled by smart contract algorithms that manage business rule scripts and parties' agreements where

investments are made through cryptocurrencies or digital currencies (Kunhibava, Zakariya Mustapha, Sa'ad, & Karim, 2021).

Therefore the use of financial system technology has experienced enormous development. Currently, fintech has become a global concern by changing the role of information technology to provide various benefits for stakeholders such as transaction speed, accessibility, security and transparency that encourage innovation in managing the financial industry (Nor, Abdul-Majid, & Esrati, 2021). Fintech is a financial innovation that generates new business models, applications, processes and products with material effects related to markets, financial institutions and the provision of financial services. Islamic fintech tries to comply with sharia and focuses specifically on institutions in accordance with Islamic sharia and the laws of Islamic countries (Alshater & Othman, 2020). The Islamic term connoted by Islamic fintech differentiates between conventional and sharia fintech operators. One example is interest-based Peer to Peer (P2P) lending, which is a business model that is developing in Fintech, which is basically rejected by the Islamic financial system because it is related to the concept (*Riba*) (Alshater, Saba, Supriani, & Rabbani, 2022). However, there are other opinions that bitcoin and cryptocurrencies that operate through blockchain are more lawful than cash because there is no debt and transactions based on blockchain technology reflect *mudharabah* because the concept of i-fintech is similar to paper money transactions. Taxes from bitcoin and crypto that transact via blockchain are clear and have been paid after the transaction is complete (Dermawan, 2022). Blockchain provides a debt-free financial technology platform (Hui, Manaf, & Shakri, 2019). Blockchain technology makes it easy for consumers to make transactions with a borderless system.

In its development, blockchain is one of the innovative ways of fintech that offers different advantages in society. Blockchain is a financial transaction technology as the main technology of bitcoin which has shifted the paradigm of the world's financial system. The shift in the global financial paradigm is increasing the diversity and complexity of business and market actors. Virtual currencies on blockchain platforms were first mooted in 2008 on the grounds that they met the need for large investors and the fund management industry to comply with Islamic rules. Meanwhile, the latest blockchain debate is about offering a safe virtual environment. But then there were doubts about the compliance of the blockchain with sharia because cryptocurrency trading turned out to be speculative. Apart from the speculative aspect, there are aspects of user anonymity and its unstable nature, cryptocurrency is a medium of exchange for prohibited transactions such as human trafficking, selling narcotics, fraud, tax evasion and money laundering (Ahmed, 2021). The big risk that arises from digital financial systems such as cryptocurrencies and bitcoin is that the regulations have not been able to be controlled so that the risk of fraud and money laundering (Kepi & Zulhuda, 2019). Blockchain technology has enabled innovative changes in financial intermediation including in Islamic capital markets and sukuk but there is still caution in incorporating innovative technologies into Islamic economic and financial systems including sukuk to protect against legal risks, regulatory risks and sharia risks. Technology is unable to cover all risk mitigation mechanisms in the issuance of one of which is the issuance of sukuk (Kunhibava, Zakariya Mustapha, Sa'ad, & Karim, 2021). Even though there are challenges and components that can lead to deviating from Islamic financial law, the blockchain already has a number of procedures that

are guaranteed “halal”. Blockchain since 2020 has had Travel Rules regulations to guarantee money laundering through the blockchain platform.

In Islamic law, cryptocurrency and bitcoin as part of the blockchain can be halal in some situations so that the halal blockchain chain in the Islamic legal system is very limited (Trichilli & Boujelbene, 2022). Indirectly, the Islamic financial system adopts the development of the global financial system. This adaptation has encouraged the formation of Islamic Financial Technology (i-fintech) which combines technology and Islamic finance to provide optimal customer service, cost cutting, operations, transparency and consistency to maintain interoperability (Chong, 2021). The scope of the Islamic financial system includes economic activities based on the Qur'an and Sunnah with the main components namely halal, free from usury, uncertainty (*gharar*) and gambling (*maysir*) (Muryanto, Kharisma, & Nugraheni, 2022). Islamic financial law is regulated in the foundations of *fiqh al-mu'amalah* which emphasizes the prohibition of usury, gambling (*maysir*) and uncertainty (*gharar*) (Hui, Manaf, & Shakri, 2019).

In Islamic financial law it is recommended for every Muslim to write down a contract of credit agreement in Islam to guarantee Sukuk in accordance with Islamic law. According surah Al-Baqarah verse 282 that Muslims are encouraged to make contracts in writing for fairness and accountability in financial and business transactions. The shariah legal and institutional framework confirms that blockchain smart contracts ensure fast transactions, accountability in accordance with shariah law standards without the presence of third parties. One form of blockchain that is clearly in accordance with Islamic law is smart sukuk transactions with real project values with clear economic activities (Chong, 2021). Blockchain applications do not pose a serious challenge to the function of Islamic finance, especially the implementation of Islamic law. Blockchain through smart contracts provides inspiration for the development of smart agents to help carry out and ensure the integrity of transactions in accordance with sharia.

Through the blockchain, Islamic finance is experiencing enhanced financial services and discovering new ways of risk assessment and a diversified credit landscape. Blockchain provides transparent transaction records that comply with Islamic law. As Surah Al-Baqarah verse 283 which explains the non-cash transaction system. Transparent transaction records in the blockchain provide clear confirmation that the blockchain complies with Islamic financial law. Blockchain financial technology has a great opportunity to be applied in Islamic financial systems such as Waqf, Zakat and Sukuk. In testing the halal blockchain based on Islamic law, it is not only tested in the context of financial regulations and transparency of financial data in business transactions. But blockchain can also ensure the safety and transparency of halal food products and ensure a halal supply chain (Hew, Wong, Tan, Ooi, & Lin, 2020). Blockchain can ensure transparency tracking scheme to guarantee food halalness. Blockchain can ensure security transparency by adopting Blockchain-Facilitated Halal Traceability (BFHT) (Sumarlia, Li, Wang, Khan, & Khan, 2023). Blockchain implements traceability by creating an information trail ensuring data security, creating secure information sharing, facilitating product quality control, real time acquisition of transparency and visibility (Agrawal, Kumar, Pal, Wang, & Chen, 2021). Blockchain can ensure the integration of blockchain-IoT and AI improves application security, efficiency and productivity (Ekramifard, Amintoosi, Seno, Dehghantara, & Parisi, 2020). Blockchain can guarantee business integrity, for example to

ensure religion-based halalness, certification and guarantee immutable data to reduce the risk of fraud (Ali, Chung, Kumar, Zailani, & Tan, 2021).

Thus blockchain does not pose a major challenge to Islamic finance because its existence, which is known as a disruptive application, does not cause a breaking down of the Islamic finance system. Blockchain encourages transformation of the Islamic finance system by providing convenience for Islamic finance. Even the existence of blockchain encourages i-fintech. Although there are differences of opinion regarding the blockchain because of the risks posed, the benefits of financial technology make Islamic finance easier and less concentrated on the conventional nature of Islamic finance. In terms of global political economy, it shows that blockchain development characterizes capitalism because it provides free competition based on competition between digital currencies. Blockchain is characterized by the development of new trust institutions, financial intermediation and economic inclusion, increasing competition and decreasing inequality (Korneychuk, 2018).

Conclusion

The emergence of blockchain with transaction systems and methods based on digital technology provides transformation opportunities for the Islamic economic system. But behind that, there are challenges where the debate about halal and haram blockchain in Islam. Based on data and analysis, this study shows that changes in the global financial order that affect the Islamic financial system are a necessity. The existence of blockchain technology and digital money is no longer an option but a necessity for the Islamic financial system to be able to adapt by adopting the existing financial system. Blockchain financial technology is transforming the Islamic financial system. Based on *fiqh al-mu'amalah*, blockchain does not contain usury and gambling laws, but only creates a large risk of uncertainty (*gharar*), namely misuse, so the potential for breaking down the blockchain against the Islamic financial system is very small. Blockchain currently has Travel Rules to reduce the risk of blockchain being used as a laundering and gambling place. So the tendency that is happening is that blockchain provides a transformation of the Islamic financial system towards i-fintech.

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