

# Dynamism and Mechanism of Digital Currency (Cryptocurrency) towards Islamic Finance

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**Abstract--** Technology advanced has brought rapid changes in all human activities along with financial activities and tools. Digital currency one of the technological innovations which have taken significant focuses from consumers, investors, researchers, entrepreneurs and policy makers around the world. with the trend of changing patterns, Islamic finance is rapidly developing all over the world by serving Muslims and non-Muslims, as a result, it is mandatory for Islamic finance to adapt with modern technology systems in terms of providing innovative products and services to the consumers in line with *shariah* perspectives. As a result, cryptocurrency (digital currency) has taken the focus on Islamic scholars in regards of its permissibility. There are many arguments over the permissibility issues. Therefore, this study aims to explore those issues and mechanisms of cryptocurrency in order to evaluate with Islamic perspective. This study gathered secondary sources from past literatures, books, news and websites with qualitative approach. The findings inclined that there are still lacking in mechanisms of digital currency to comply with Islamic perspective such as real asset backed and legal authorization. The findings of this study will benefit the Islamic scholars and policy makers along with Muslim consumers and investors in regards of permissibility and developing existing cryptocurrency to widely use in the Islamic finance and banking sector.

**Keywords:** *Digital currency, Cryptocurrency, Islamic cryptocurrency, halal currency, Islamic financial technology, Islamic finance and banking*

## I. INTRODUCTION

The economic world has adopted many changes/innovations in order to maintain the movement of technology development in regards of diversification (Biancone, Secinaro, & Kamal, 2019). The traditional practices of monetary and financial activities are changing rapidly due to the improvement in information technology as well as the information communication system. The technology acceptance model (TAM) introduced by Davis (1989) asserted that the acceptance of

advanced technology determined by the consumers based on the reliability, flexibility and the perceptions (Echchabi, 2018; Islam, 2011). Hence, the world is introducing many new technologies in all aspects of human activities including economic, engineering and societal. As a result, the governing body of the payment system, investment policies and method, monetary controlled and settlement is shifting significantly in order to create the secured and advanced system by adopting technology features. Islamic finance is rapidly developing all over the world (Mukhibad, 2019) by serving Muslims and non-Muslims (Biancone & Radwan, 2018), as a result, it is mandatory for Islamic finance to adapt with modern technology systems in terms of providing innovative products and services to the consumers in line with *shariah* perspectives. In recent times, the world is discussing over crypto currencies as the digital money which brought the positive and negatives issues among the policy makers, economists, academicians and researchers. The crypto currencies are increasing the people's curiosity in this era of technology (Oziev & Yandiev, 2018). The intensification of digital currencies are incurred by the excessive demand from the consumers, investors, financial institutions, share market speculators, curiosity and interest in technology based features in payment system (Zubaidi & Abdullah, 2017). The Islamic finance is also aware of the uses of these digital currencies in their transaction and investment.

Cryptocurrencies are the form of digital fiat currency which is being accepted by the most users that rely on internet. The internet users are increasing over the time and ICT (Information Communication Technology) has taken major part of business platform whereas consumers are demanding something not carried and the quickest way to transact. According to Jung et al., (2019), there are more than eleven thousands crypto currencies with diverse categories using as medium of exchange globally. *Ethereum, Bitcoin, Litecoin, Ripple* consider as major cryptocurrencies whereas

'Bitcoin' is the most popular trading financial asset in the world digital currency market (Muedini, 2017). However, conventional finance system is adapting with this digital currencies whereas the Islamic finance is struggling to accept it due to the debates over permissibility and the implementation according to the Islamic perspectives. In addition, the notion and definition of crypto currencies are still indistinct and extensive (Jung et al., 2019). Islamic finance also requires filtering the certainty, financial viability, legal transactions complied with *shariah* rules, permissibility and risks in order to adopt new technological tool or products. Hence, the consequences of current situation of Islamic financial system are the unavailable evidence and proper guidelines to adopt crypto currency to apply in the transactions and investments perspectives. Furthermore, the appropriate guidelines and *shariah* based innovations are not available in the system whereby Islamic finance is reluctant to implement. Subsequently, there are very limited research conducted in this stimulating digital currencies permissibility and economic benefits in line with *shariah* perspectives whereas different findings created havoc among Islamic investors and consumers.

Therefore, this study aims explore possible suggestions and ways to fulfil the gaps and identify the evidence and methods to accept and implement current cryptocurrencies through dynamism and mechanism of advanced financial technology in Islamic financial system. The findings of the research incline to be important to Islamic scholars, Islamic investors and consumers, economists, researchers, and government to make the decision and effective mechanisms in order to accept or decline the new technology based currencies. Therefore, this research will be tended to noteworthy for both practitioners and policy makers to evaluate the acceptability and permissibility, economic benefits of using Islamic crypto currencies in order to sustain the Islamic finance and banking.

## II. DEFINITION AND CONCEPT OF CRYPTOCURRENCY

Cryptocurrency is a piece of innovation of technology world which is a digital or virtual currency that electronically encoded for security which being used for online transactions (Bakar, Rosbi, & Uzaki, 2017; Harris Irfan, 2019) which is different than historical fiat currency in regards of issuing, origin of issuing and physical subsistence. Cryptocurrencies are complete transformation of fiat currency through the technology based innovation that has no border in the world placed in the digital

world market trading on crypto assets for the entire twenty four hours (Jung et al., 2019). The author also added that these currencies have the issuing company, carried out the physical value through bills or coins. Besides being a digital currency, these cryptocurrencies are helping the financial technology system in order to innovate, transform and incorporate better understanding, smoothness, reliability and accountability by the feature of Block chain (Zubaidi & Abdullah, 2017). Thus, cryptocurrency exists on the computers similar to bank accounts and the money stored in the bank exists as digits on a computer whereas the fintech has mostly replaced the cash or paper money (Harris Irfan, 2019).

Cryptocurrencies are known as token transferred from one party to another party through peer to peer (P2P) online transaction beyond a centralized server whereby it delivers the message to all parties informing the ledgers of transaction and accepted by other recipient. The introduction of first cryptocurrency is bitcoin, a peer to peer (P2P) online cash system which is created in 2008 during the financial crisis (Muedini, 2017). Furthermore, cryptocurrency is not issued by central banks as paper money, but it is formed through rules of creation or algorithm and decentralized based on block chain technology which exists on millions of computers all over the world, thus, it cannot be printed by any central body (Harris Irfan, 2019).

## III. ISSUES AND CHALLENGES OF CRYPTOCURRENCY

Cryptocurrencies are no longer apart from the risks associated with instability of exchange rate, market manipulation and regulatory risk (Peters et al., 2016). Hence, many creditors are reluctant to support the cryptocurrency firms due to the risk of money laundering (Seele, 2018) and tax avoidance, in addition to it, the crypto currencies are not the creation for financial solidity whereas it creates the platform for the digital investors to gather financial benefits through momentary conjecture and gaming through digital world (Jung et al., 2019; Peters et al., 2016). Consequently, Jan Bergstra (Dutch computer-scientist) treated cryptocurrency as money-like informational commodity and the design and concept of it comply with understanding of money concept (BNC, 2018).

For instance; there are several governments denied to accept these cryptocurrencies (Zubaidi & Abdullah, 2017) and against it whereas implemented law on it. Chinese government proscribed the Initial Coin Offering (ICO) on September, 2017 and banned the cryptocurrency exchanges including

restricted people in order to stay away from incurring to exchanges and offering cryptocurrency trading on January, 2018 (Jung et al., 2019). European regulator is discouraging the financial institutions and individual to accept and trade using cryptocurrencies (Peters et al., 2016). Consequently, The state bank of Vietnam declared the cryptocurrencies as illegal system under the regulation system and restricted citizen to avoid related transactions and trading as it is criminal offense according to the law, but cryptocurrencies treated as investing assets by the Korean people which allow them to take risk of financial loss and unsecured transaction information (Jung et al., 2019). Not to mention, cryptocurrencies are having several issues while it's growing all over the world.

#### IV. CRYPTOCURRENCY IN ISLAM

Researchers and policy makers are aware of this digital currency's application enhance the financial market risks associated with funding for terrorism (Irwin & Milad, 2016), security of asset, capital control, hedge and many others along with erupting foreign market interruption and capital market deformation (Jung et al., 2019; Peters et al., 2016). Islamic financial system focuses on only intrinsic and physical values of economic endeavours whereas it is fiat money or any terms being used for financial transactions. As a result, the *shariah* scholars have various opinions on the implementation of crypto currencies as they have provided both permissibility and prohibition (Depietro, 2018). Durban based Darul Ihsan Centre, several scholars in Turkey, India and UK and Egypt's grand Mufti declared cryptocurrency impermissible in Islamic finance (AlJazeera, 2018). However, Depietro (2018) has argued that the crypto currency creating through online put some efforts to secured it and requires signature to make it works and useful through digital mediator. He also pointed the history of the diner (gold) and dirham (silver) creations which needed efforts to make the shape of those currencies, but those currencies were used by only Arabs, therefore, they still had to use different currencies outside of Arab countries.

Though, currency is the one that has value, component of account, use as medium of exchange and transferable for the payment consider as money (Adam, 2017). Similarly, Monzer Kahf (Islamic scholar) opined that cryptocurrency is similar to any other currency which is money within its community and transferable with other currencies is definitely subject align with similar conditions of currency exchanges (BNC, 2018). Even, there are many scholars do not treat the cryptocurrencies as genuine

money but cryptocurrencies have those values to be considered as digital money that refer to be medium of exchange (Muedini, 2017). Consequently, Jan Bergstra (Dutch computer-scientist) treated cryptocurrency as money-like informational commodity and the design and concept of it comply with understanding of money concept (BNC, 2018). In Islamic economics and finance, the store of value function is a testimony to the validity of medium of exchange (Abdullah, 2016). According to the Zubaidi & Abdullah (2017), cryptocurrencies have no intrinsic value. Similarly, Bakar et al. (2017) identified that cryptocurrency (bitcoin) has no real form which only exists in a network without intrinsic value which is not redeemable for another commodity. Moreover, Meera (2018) stated that cryptocurrencies are not backed by real assets, therefore, it is not *shariah* compliant. Interestingly, there is no intrinsic value for several existing money for instance; gold, iron, bead, plastic and paper as these things are not eatable neither drinkable or usable to protect from any environmental calamities but they still have price. Bello Lawal Danbatta (Secretary General, IFSB, Malaysia) stated that cryptocurrency offer various advantages to Muslim people such cost saving, efficient transactions and include those are un-bankable (Bakar et al., 2017; Canard & Gouget, 2007; Whitehead, 2019).

Cryptocurrencies are not treating as financial innovated pattern by many as it is just a digital product that plays with speculations considering gambling outlay targeted to generate insignificant outcome (Jung et al., 2019; Seele, 2018). Therefore, authors has treated cryptocurrency framework is linked with uncertainty (*gharar*) (Bakar et al., 2017). Besides, cryptocurrencies are not fiat money or real money. The study found the existence of uncertainty which can contribute to injustice in the society (Meera, 2018). Surprisingly, Muedini (2018) highlighted the issues of current fiat and paper money to compare with acceptability of virtual currency. Muedini, (2017); Zubaidi and Abdullah(2017) mentioned that inflation, unlimited supply, government abuse and forgery lead fiat currency less suitable for Islamic finance. Interestingly, they found cryptocurrencies better option for Islamic finance due to principles of justice and social fairness that characterized in Islamic perspectives. Furthermore, Jan Bergstra (Dutch computer-scientist) clarified that there are four principles complied with cryptocurrency among five principles of Islamic finance whereas only avoidance of gambling does not observed (BNC, 2018). Hence, cryptocurrency is treated as most Islamic form of money which was not introduced by Islamic finance (Harris Irfan, 2019).

However, the value of money can be reduced that stored in public's hand through inflation that



reduce the consumption power which lead to uncertainty (*gharar*) that can be led to void contract due to its value (Harris Irfan, 2019). Subsequently, cryptocurrencies are unable to inflated, ease to transport and decentralized which allow users to have freedom and it is also not used for double spent (Muedini, 2018). in fact, due to fluctuations of cryptocurrencies cannot be impermissible whereas fiat currencies have the same situation (Abubakar, Ogunbado, & Saidi, 2018). Furthermore, cryptocurrency consider as commodity (mal) through fulfilling the conditions of commodity and thus allowed for trading (Abubakar et al., 2018). Atif Yaqub ( Muslim block chain expert) explained that individuals are prone to involve in alternative currency beyond the doubt on permissibility of emerging technology (Gabriel, 2019). Similarly, Meera (2018) found cryptocurrency as global choice for that alternative currency even though it is not fiat currency. Therefore, the regulators in financial industries require to understand the dynamism and mechanism of financial technology and its impact in order to adapt cryptocurrency which deemed to be popular among community members (Arsov, 2017).

The grand Mufti Shaikh Shawki Alam banned the trading of cryptocurrency as it's against the Islamic principles where it has possibility of money laundering, fraud and financing terrorists, additionally, it has not set any rules which make it void contract (Abubakar et al., 2018; Harris Irfan, 2019). In addition, there are no regulatory authorities from the government all over the world to stabilize the digital currency and protect the trading from negative effects (Feng, Wang, & Zhang, 2018; Meera, 2018; Peters et al., 2016; Zubaidi & Abdullah, 2017). Furthermore, Bakar et al.(2017) found that cryptocurrency is suitable for certain communities and it requires authority to implement in all sectors of economy through validity and reliability on the transaction. There may be a possibility of manipulation of the system without authorization lead to uncertainty (*gharar*). In contrast, Harris Irfan (2019) argued that these issues (money laundering, fraud and terrorism financing) mainly facilitated through US dollar. Thus, cryptocurrencies do not affect significantly applying in utility, ease, competence and expediency although it is cost saving in regards of allocation and administration expenses due to insufficient knowledge over digital currency by consumers (Jung, 2019). But the fiat currency take longer period during its transaction and trading period whereas cryptocurrencies lessen the complicity of payment services, in addition it enhanced the expediency of payment system which positively affected the performance of cryptocurrencies (Jung et al., 2019). Surprisingly, Cryptocurrency (block chain mechanism) transform the financial transaction from traditional way

through significant digital transformation whereas it built trust and authority in a decentralized network than powerful centralized institution (Arsov, 2017). Similarly, Harris Irfan (2019) also stated that fiat currency dictated by government without setting rules either and citizen placed their trust in the fiat currency being privileged in the exchange of real goods and services.

## V. DATA & METHODOLOGY

This study adopts qualitative approach in nature through collecting, gathering and findings from secondary sources such as research papers, news, websites, books and interview posted online. The study pointed out all important findings, data and suggestions to achieve the objective. and this study adopted interview from Dr. Mohd Daud Bakar (the Chairman of the *Shariah* Advisory Council, Malaysia) from secondary source (Volcan Post, 2018). In this interview, he expressed his views on cryptocurrency on both legal and *shariah* law.

### A. *Cryptocurrency is more than just a currency*

According to him, cryptocurrency is happening globally and it has ways to conserve *shariah* within this mechanism of it. He explained the mechanism of cryptocurrency which is recorded by more than one party through a ledger system and eventually it aids avert altering. He also treat cryptocurrency as not only currency but also a tool for remittance which save cost and time.

### B. *Cryptocurrency could help the fight against money-laundering*

Dr. Mohd Daud Bakar seen the spending through cryptocurrency may help with accountability. For instance, zakat (form of alms giving) payers may ensure that their contributions distributed among those are in need. Cryptocurrency can easily detected where it is kept compare to fiat currency specially cash that can easily hide their identities. In this scenario, cryptocurrency may help prevent money laundering if it is applied right and monitored by right authority.

### C. *Cryptocurrency can be local currency in Malaysia*

Malaysia may turn cryptocurrency as local currency if they want to adapt it similar to Dubai where they started to treat it as local currency regardless of borderless or global cryptocurrency. Indeed, Japan has acknowledged cryptocurrency as legal and Dubai has launched its own cryptocurrency in October, 2017.

#### D. Cryptocurrency as haram (impermissible)

He argued that some Islamic jurists consider it as haram due to uncertainty (*gharar*). But he thinks they have mixed uncertainty and risks together whereas risk is part of *shariah* that human go through every day in their life, for example, purchasing properties, shares and gold is risky. In addition, cryptocurrency has fluctuation in regards of value which can be go up and down same as value of gold price and it caused several authorities to declare cryptocurrency as haram. He also mentioned that from the fatwa standpoint, a government can treat it as impermissible due to its risk but according to *shariah* perspective, it cannot be declared as haram due to the risk.

#### E. Cryptocurrency and trust

Cryptocurrency (digital currency) created based on trust or peer-to-peer whereas fiat currency is also based on trust. He explained the role of USD which used as global currency and the value of it fluctuated over the time, losing and gaining trust and also it is being used by the World Bank to balance the global exchange. Therefore, American may lose their faith in their currency but it is still will be valued as currency.

#### F. Malaysian regulators on cryptocurrency

He has suggested the regulators to create their own e-wallet in order to understand cryptocurrency whereas they can observe how the eco-system works in e-wallets.

## VI. FINDINGS AND DISCUSSION

From the above literatures and interview, there are few issues were discussed over the dynamism and mechanism of cryptocurrency towards Islamic finance. Most opponent scholars argued over the legal authority of cryptocurrency whereas it requires legal governor or government to authorize this digital currency. Besides that, there is huge debate on store value or intrinsic value of cryptocurrency. In addition, several scholars ignored it as they claimed it has no asset backed. Furthermore, some scholars treat cryptocurrency as just a digital mechanism that suitable only for certain people which are still consist of uncertainty and Islam prohibits uncertainty from all activities in life.

The history of economy has emerged its scopes and practices over the time. In the same time, Islamic scholars and jurists have developed and innovated products, services, application of existing Islamic contracts and laws in modern aspects and social practices in order to follow the global trend as well as to fulfil the social demands (Harris Irfan, 2019). In history of Islamic practices on money, raw materials such as silver, gold used as coin in the

form of money (Adam, 2017), and during Malik Ibn Marwan's ruling period, the regulation introduced in order to issue of coins as a form of money, the transformation of money from gold and silver as coin took several arguments by Islamic scholars (Adam, 2017; Ahmed, 1989), indeed, there was an issue in regards of valuing silver and gold among Islamic scholars till the paper currency introduced (Siegfried, 2001). However, the movement from silver and gold as currency towards paper money has also raised the issues of permissibility to use it as medium of exchange among the Islamic thoughts whereas many scholars accepted it as legal form of money creation while others treated it as completely impermissible according to *shariah* (Adam, 2017; Muedini, 2017; Zubaidi & Abdullah, 2017). For Instance; Anwar (1993) stated that the creation of paper money is against the Islamic principles as the author thinks the government regulation authority whip the property from the people through advanced innovation. The author also added that fiat currency does not have intrinsic value. The supply of dollar has tremendously increased when the world economy transformed from gold standard to one based on several fiat currencies (US dollar as world's reserve currency) from 1971 (Harris Irfan, 2019). As a result, the value against new paper money stored by the US dollar implemented in many countries.

Besides, the history also shown that there were many debates or arguments over any new scientific innovations but over the time, those are accepted and applied in Islamic world. For instance, telegraph, loudspeaker, television. The Islamic scholars are always debating in regard of issues such as nature of interest, debt, types of donations, financial activities that being used in the economy and social perspectives (Muedini, 2017). Most of the arguments from opponents scholars are temporary issues which can be mitigate through proper regulation and mechanism by the association of governments (Abubakar et al., 2018). Thus, Islamic finance mainly focuses on *shariah* permissibility in order to practice any kind of transactions, businesses, investments and financial activities. Risks associated with interest, uncertainty and gambling are completely against *shariah* rules (Zubaidi & Abdullah, 2017), and as a result, those must be free from any innovative or adopted activities in the Islamic finance system.

The Holy Quran explains the role of money.

*“And do not give the weak-minded your property, which Allah has made a means of sustenance for you” (Quran 4:5).*

It can be explained as that property/money created to hold up, preserve and prolong others that Allah has created this property powerful to sustain

and uphold the system of this. It means money that upholds the entire financial system has no end, ends the one and facilitate others earth (Adam, 2017). According to the Muedini (2017), the value of money gradually decreases over printing of paper currency that may lead to an inflation (Zubaidi & Abdullah, 2017) which perhaps affects the value/trust of specific currency. Islamic finance is against the inflation. It can be elaborated from the findings of Chapra (1996) where Islamic finance strongly consider the store value of money and its stability due its fair and loyalty dealings with all financial and social endeavours, in addition, inflation has negative impact on socio-economic fairness and human wellbeing. With the acceptance and trust by the public, currency being exchanged and traded as medium of exchange widely.

Arsov (2017) presented four characteristics/advantages of bitcoin (cryptocurrency) such as divisibility which can be divisible and making it into uniform pieces which cannot be done to gold; malleability which may enable to combine all bitcoins fit into a wallet and store them into an account; counterfeited-adversity whereas it can be viewed everyone's bitcoins if anyone lies through having a copy of ledger; fungibility which denotes the equal value of all parts of same denomination, it is perfectly possible in regards of cryptocurrency, but it is quite impossible for gold bars. Nobody may predict or judge gold bar with other same sized gold bar in regards of same purity and worth. Interestingly, he also argued that gold acquire through physical mining and cryptocurrency created through virtual mining. Moreover, the price of gold is not always stable. It has volatile market price which can be tradable in the market. Therefore, the initiative by the government will enhance the popularity and acceptance of cryptocurrencies among the consumers and investors through building trust and confidence (Jung et al., 2019).

However, there is no literature found where it declares gold-backed cryptocurrencies impermissible in Islam whether it can be desirable by community and consistent with maqasid al shariah. Dubai based OneGram cryptocurrency backed by physical gold which stored in a vault and it limited to speculation (AlJazeera, 2018; Meera, 2018). Hence, Ibrahim Mohammed (the founder of Briton) stated that gold was the first form of money in Islamic communities, so this is permissible. Not to mention, HelloGold was launched with gold backed cryptocurrency in Malaysia which is achieving positive signals from Islamic advisors (AlJazeera, 2018). Manuel Ho (Chief Marketing Officer of HelloGold) stated that HelloGold is Islamic as the transactions incurred within distinct period which make them less volatile and

uncertainty of pricing (AlJazeera, 2018). UAE has initially experimented Halal Chain coin which is linked date with permissible goods (AlJazeera, 2018). Dr. Mohd Daud Bakar pinned the trouble of understanding the concept and nature of cryptocurrency by regulators, similarity, Harris Irfan (MD, Cordoba Capital in London) mentioned that Islamic law scholars find difficulties to understand the complexities of cryptocurrency (AlJazeera, 2018). Therefore, Farrukh Habib (Research officer ISRA, Malaysia) recommended shariah rulings to deal with one specific cryptocurrency or include all types ignoring their eccentricities as there are hundreds of cryptocurrencies created with different features linked to distribution, mining and trading (AlJazeera, 2018). Moreover, Muslim consumers are prone to accept electronic banking and financial products in recent times (Echchabi, 2018). Thus, financial technology has become an important tool for conventional finance whereby Islamic finance is still under early platform (Biancone et al., 2019). Not to mention, Bello Lawal Danbatta (Secretary General, IFSB, Malaysia) stated that Islamic cryptocurrency will start to work if only regulators understand how fintech works. He also stressed out the lacking of capable regulators, scholars and standard settings bodies those can oversee the potentiality and understand the Islamic finance ecosystem (Whitehead, 2019).

Subsequently, the Saudi Arabian and UAE central banks warned their citizens over the risk of cryptocurrency trading but they did not ban it (AlJazeera, 2018). Similarly many government bodies are worried and concern over the instability but they are seeking for benefits from this new technology innovation. In this scenario, it is cleared that there is huge potential for developing cryptocurrency as Islamic cryptocurrency through shariah compliant mechanism. Ziyaad Mahomed (HSBC Amanah, Malaysia) suggested to find out the ways to make cryptocurrency Islamic rather than debate on its permissibility (AlJazeera, 2018). Subsequently, Abdul Qahir Qamar (Director, the Fatwa Department, Fiqh Academy) stated that academy did not issue any resolution on cryptocurrency but aim to discuss on it in official sessions (AlJazeera, 2018). Hence, Malaysia has started to develop Islamic backed block chain currency and it will be introduced once the acceptance of digital currency widely spread out (Whitehead, 2019). Therefore, it will be benefitted for Muslim regulators, scholars and policy makers to develop and adopt the dynamism and mechanism of financial technology towards Islamic finance with proper and permissible concept before forced to by the community demand.



## VII. CONCLUSION AND RECOMMENDATIONS

Islam is complete way of life whereas it describes all perspectives and guidelines for human life in this world based on Holy Scriptures. Therefore, Muslim practice and live according to Islamic teachings and law of *shariah* that adopted from *al-quran*, *hadith* and Islamic jurists. thus, a Muslim definitely looks for reasonable argument whereas Islamic teachings conclude the endeavours as permissible (Javed, 2018). So, any type of investment of application and adoption of financial mechanisms definitely required to be compliant with *shariah*. Therefore, Islamic cryptocurrency is the demand of modern technology based transaction and trend of ease and cost consuming approach.

In addition, Muslim entrepreneurs have profound duty on delivering Islamic prudence which will portrait a good image, so that other non-Muslims can follow. Literature review recommends us to develop and enhance the framework architecture for the crypto currency instead of traditional fiat currency. Islamic *shariah* compliant Crypto currency can be feasible if and only if it is able to provide solutions to overcome the current vulnerabilities of Crypto currencies related to value creation and regulatory system. Gold-backed crypto currencies and payment systems with netting facilities and public regulatory systems are the best form of money for this age. The store of value function of money is a litmus test as to the validity of a monetary economics and in terms of the Maqasid al-Shari'ah, the protection of wealth (Hafiz al-mal). Islamic crypto currency can stands for globalization and can be a revolution in economic history if it is developed optimally with the store of value function with Islamic Shari-ah principles. In fact, many people are benefitted through digital mechanism of currency, therefore, a governing body should step as intermediary as guarantor and provide indemnities despite complexities (Arsov, 2017; Naqvi, Shafique, & Khan, 2019). Islamic finance and banking, institutions, central banks should promote *shariah*-backed cryptocurrency along with entrepreneurial start-ups and also individual Muslim government should introduce a *halal* coin.

## REFERENCES

- [1] Abdullah, A. (2016). *The Islamic Currency*. International Council of Islamic Finance Educators.
- [2] Abubakar, Y. S., Ogunbado, A. F., & Saidi, M. A. (2018). Bitcoin and its Legality from Shariah Point of View. *Journal of Management*, 1(4), 13–21.
- [3] Adam, M. F. (2017). Bitcoin : Shariah Compliant ? *Amanah Finance Consultancy Ltd*.
- [4] Ahmed, Z. (1989). Currency Notes and Loan Indexation. *Islamic Studies*, 28(1), 39–53.
- [5] AlJazeera. (2018, April 9). Islam and cryptocurrency, halal or not halal? *Aljazeera News*. Retrieved from <https://www.aljazeera.com/news/2018/04/islam-cryptocurrency-halal-halal-180408145004684.html>
- [6] Anwar, M. (1993). Strategies to Settle Existing Debts under an Islamised Banking System. *The Pakistan Development Review*, 32(4), 961–971.
- [7] Arsov, A. (2017). Bitcoin as an Innovative Payment Currency in Germany : Development of the e-Gold Standard. *Journal of International Business Research and Marketing Volume*, 2(2), 33–42. <https://doi.org/10.18775/jibrm.1849-8558.2015.22.3005>
- [8] Bakar, N. A., Rosbi, S., & Uzaki, K. (2017). Cryptocurrency Framework Diagnostics from Islamic Finance Perspective : A New Insight of Bitcoin System Transaction. *International Journal of Management Science and Business Administration*, 4(1), 19–28. <https://doi.org/10.18775/ijmsba.1849-5664-5419.2014.41.1003>
- [9] Biancone, P. Pietro, & Radwan, M. (2018). Social Finance And Unconventional Financing Alternatives : An Overview. *European Journal of Islamic Finance*, 10, 1–6.
- [10] Biancone, P. Pietro, Secinaro, S., & Kamal, M. (2019). Crowdfunding and Fintech : Business Model Sharia Compliant. *European Journal of Islamic Finance*, 12, 1–10.
- [11] BNC. (2018). Sharia Law And Bitcoins Fatwa.
- [12] Canard, S., & Gouget, A. (2007). Divisible E-cash Systems can be Truly Anonymous. In *Annual International Conference on the Theory and Applications of Cryptographic Techniques* (pp. 482–497). Berlin: EUROCRYPT 2007.
- [13] Chapra, M. U. (1996). Monetary Policy in an Islamic Economy. In Z. Ahmed, M. Iqbal, & M. F. Khan (Eds.), *Money and Banking in Islam* (pp. 27–46). Islamabad, Pakistan: Institute of Policy Studies.
- [14] Depietro, A. (2018). Blockchain And Islamic Banking Are Working Together, And Everyone Stands To Benefit. *The Forbes*. Retrieved from <https://www.forbes.com/sites/andrewdepietro/2018/07/11/blockchain-islamic-banking-benefits/>
- [15] Echchabi, A. (2018). E-Banking Acceptance in Thailand : An Emphasis on Islamic Banks ' Customers. *European Journal of Islamic Finance Privacy*, 9, 1–5.
- [16] Feng, W., Wang, Y., & Zhang, Z. (2018). Informed trading in the Bitcoin market. *Finance Research Letters*, 26, 63–70. <https://doi.org/10.1016/j.frl.2017.11.009>
- [17] Gabriel, B. (2019). Ethereum deemed halal by Muslim scholars, may stimulate ETH demand. Retrieved September 15, 2019, from <https://cryptoslate.com/ethereum-halal-muslim-scholars-eth-demand/>
- [18] Harris Irfan. (2019). Cryptocurrency and the Future of the Islamic Economy.
- [19] Irwin, A. S. M., & Milad, G. (2016). The use of cryptocurrencies in funding violent jihad. *Journal of Money Laundering Control*, 19(4), 407–425. <https://doi.org/10.1108/JMLC-01-2016-0003>
- [20] Islam, A. Y. M. A. (2011). Viability of the extended technology acceptance model: An empirical study. *Journal of Information and Communication Technology*, 10(January 2011), 85–98.
- [21] Javed, D. (2018). Sharia Law And Bitcoins Fatwa.
- [22] Jung, Kyung-Jin; Park, Jung-Boem; Phan, Nhu Quynh; Bo, Chen; Gim, G. (2019). *An International Comparative Study on the Intension to Using Cryptocurrency*. Springer Nature Switzerland AG 2019 (Vol. SCI 788). Springer International Publishing. <https://doi.org/10.1007/978-3-319-05717-0>

- [23] Meera, A. K. M. (2018). Cryptocurrencies from Islamic perspectives : The case of bitcoin. *Bulletin of Monetary Economics and Banking*, 20(4), 475–492.
- [24] Muedini, F. (2018). The Compatibility of Cryptocurrencies and Islamic Finance. *European Journal of Islamic Finance*, 10(August), 1–11.
- [25] Mukhibad, H. (2019). The Role Of Sharia Supervisory Boards in Meeting Maqasid Syariah – Study on Islamic Banks in Indonesia. *European Journal of Islamic Finance*, 13(August), 1–10.
- [26] Naqvi, S. M. I. H., Shafique, B., & Khan, A. A. (2019). Shariah Compliant Model of Currency Management – Expanding Landscape of Islamic Finance from Micro to Macro Level. *European Journal of Islamic Finance*, 12, 1–14.
- [27] Oziev, G., & Yandiev, M. (2018). Cryptocurrency from Shari'ah Perspective. *Ssrn*, 1–18. <https://doi.org/10.2139/ssrn.3101981>
- [28] Peters, G. W., Chapelle, A., & Panayi, E. (2016). Opening discussion on banking sector risk exposures and vulnerabilities from Virtual currencies: An Operational Risk perspective. *Journal of Banking Regulation*, 17(4), 239–272. <https://doi.org/10.1057/jbr.2015.10>
- [29] Pikri, E. (2018). Is Cryptocurrency Haram? The Chairmain Of BNM's Shariah Advisory Council Says No. Retrieved September 16, 2019, from <https://vulcanpost.com/632153/haram-cryptocurrency-syariah-advisory-council/>
- [30] Seele, P. (2018). Let Us Not Forget : Crypto Means Secret . Cryptocurrencies as Enabler of Unethical and Illegal Business and the Question of Regulation. *Humanist Manag J*, 13, 1–7.
- [31] Siegfried, N. A. (2001). Concepts of Paper Money in Islamic Legal Thought. *Arab Law Quarterly*, 16(4), 319–332.
- [32] Whitehead, R. (2019). Malaysia's leading Shariah scholars support halal cryptocurrency but say Islamic finance ecosystem needs to catch up. Retrieved September 16, 2019, from [https://www.salaamgateway.com/en/story/malysias\\_leading\\_shariah\\_scholars\\_support\\_halal\\_cryptocurrency\\_but\\_say\\_islamic\\_finance\\_ecosystem\\_needs\\_to\\_catch\\_up-SALAAM08052019011545/](https://www.salaamgateway.com/en/story/malysias_leading_shariah_scholars_support_halal_cryptocurrency_but_say_islamic_finance_ecosystem_needs_to_catch_up-SALAAM08052019011545/)
- [33] Zubaidi, I. B., & Abdullah, A. (2017). Developing a Digital Currency from an Islamic Perspective: Case of Blockchain Technology. *International Business Research*, 10(11), 79. <https://doi.org/10.5539/ibr.v10n11p79>



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