



Can Bitcoin be used for Zakat Payment?

SITI KHALILAH BASARUD-DIN^{a*} AND NIK SAFIAH NIK ABDULLAH^a

^a*Faculty of Muamalat and Islamic Finance, Kolej Universiti Islam Perlis, Malaysia*

ABSTRACT

Bitcoin (BTC) was developed as a digital currency to facilitate online payment transactions between one party or individual and another without using a third party. However, the use of BTC can also be misused for money laundering, fraud in investment schemes, engaging in cyber-crimes, funding activities, etc. Additionally, the highly complex method of calculating BTC makes BTC irrelevant as a measure of value. Although there are inherent advantages and disadvantages to using BTC, it can be subject to zakat. This study explores how zakat institutions can receive zakat in Bitcoin (BTC) transactions. BTC has both advantages and disadvantages, including potential misuse for illegal activities and vulnerability to security breaches. The study employs a qualitative method, including interviews with zakat institutions and BTC practitioners, and document analysis. The aim is to create a model for zakat institutions to receive donations in BTC, contributing to the management of zakat and adapting to technological changes. The study's findings can help prepare a strategy for receiving zakat in BTC and addressing potential challenges. By bridging the literature gap, the study offers new insights and perspectives on bitcoin as a zakat payment asset. Its findings can be valuable for policymakers, religious scholars, and practitioners in the realm of Islamic finance and zakat management. Ultimately, the research seeks to improve the early preparation and strategizing of zakat institutions in the face of evolving donation methods.

JEL Classification: F39

Keywords: Bitcoin; Blockchain; Cryptocurrency; Zakat Institution

Article history:

Received: 10 February 2023

Accepted: 27 July 2023

* Corresponding author: Email: khalilah@kuips.edu.my

DOI: <http://doi.org/10.47836/ijeam.17.2.09>

© International Journal of Economics and Management. ISSN 1823-836X. e-ISSN 2600-9390.

INTRODUCTION

The evolution of currency is now increasingly dynamic and fast-moving. Historically, it can be observed from the barter system to gold, then the use of coins and banknotes. After that, using debit and cashless cards via smartphone apps continued to facilitate money management as consumers did not need to physically keep much money on hand (Mohd Yaakob et al., 2019). Other than that, this evolution continues in line with technology, with digital currencies have been created and can be stored electronically. This virtual currency exhibits growth and improves development (Nurulain Atiqah et al., 2018). This is due to electronic currencies such as DigiCash or Cybercash now functioning as innovative currencies to convert and transfer money between two parties digitally quickly. The term cryptocurrency refers to the digital currency flourishing with the latest concept in the global market economy (Mohd Yaakob et al., 2019). This currency utilises cryptography as a security system. Similarly, this currency system works like a regular currency allowing users to make online transactions for goods and services. The unique thing about this system is that it does not involve third parties such as banks, simplifying the process and can reduce additional charges for any transaction (Vejačka, 2014).

A cryptocurrency is a digital asset designed to serve as a medium of exchange. It uses encryption to secure transactions and restrict the creation of new coins. A subset of digital currencies, alternative currencies, and virtual currencies are referred to as cryptocurrencies. Note that cryptographic technology is applied in cryptocurrencies for various functions, including transaction protection, managing the creation of new cryptocurrency units, as well as authorising cryptocurrency transfers. Therefore, cryptocurrencies are more difficult to counterfeit, attributable to this security feature, making transactions safer.

BTC is one of the virtual currencies, which is a new phenomenon all over the world. The emergence of BTC in 2009 can be considered an alternative to the fiat currency already under commerce management in this century. In response to the concept of freedom of payments, the request for BTC soars because BTC users are free to make transactions. The use of cryptography controls the movement of BTC, making it the first global currency not to be regulated by any authorised agency (Meera, 2018). Without government regulations, BTC users need not worry about the law's provisions and restrictions in business management.

However, there are various risks in utilising BTC transactions that involve consumers. Since BTC transactions are easier and faster than the use of money, the use of BTC can also be misused for money laundering (Sat et al., 2016), fraud in investment schemes (Chohan, 2018), cybercrime perpetrators (Safitri et al., 2019), financing of terrorist activities (Ziegler, 2018) and others. Hence, some countries such as the UK, US, Japan, South Korea, France, and Iran have taken drastic measures to provide regulatory rules to protect consumers by imposing taxes on every transaction. Moreover, extreme volatility makes BTC difficult to be accepted as a payment and measurement tool. BTC is also irrelevant to use as a measure of value as the calculation method is highly complex. Not only that, BTC is unsuitable as a value storage tool because cybercriminals often target BTC wallet virtual securities, which can lose liquidity and be vulnerable to hyperinflation (Muhammad Amir and Ahmad Dahlan, 2019). Meanwhile, Grant and Hogan (2015) stated that this BTC currency has the same price fluctuation risk as other currencies. Clearly, stability is the main issue here. Considering the history of BTC, which is still said to be new, this currency has faced the problem of price fluctuations.

However, since there is no legal framework to offer support in the event of a virtual wallet hack, BTC owners risk having their virtual funds stolen online. For instance, a Chinese online drug website, Sheep Marketplace, had 96,000 BTCs stolen in December 2013, and a renowned businessman who engaged in BTC exchange transactions filed for bankruptcy. In other cases, Mt. Gox revealed in February 2014 that a security flaw had resulted in the loss of about 850,000 bitcoins, which were then valued at about \$400 million. This dealt the Bitcoin community a fatal blow and significantly decreased the value of bitcoin. Soon after the incident, Mt. Gox declared bankruptcy, and Mark Karpeles, its former CEO, was detained and accused of theft and data manipulation. The incident made it clear how crucial security controls are for cryptocurrency exchanges and how the sector needs more regulation (Perez, 2015). Other than that, the Slovenia-based NiceHash hacking in late 2017 saw a BTC theft worth 70 million USD. Coincheck was also one of the victims of hacking by cybercriminals resulting in the loss of BTC worth 530 million USD.

According to Grant and Hogan (2015), BTC currency exchange transactions can be regarded as free from issues relating to international currencies and simple to conduct because they are not under the control of

any party. Nevertheless, they also carry the same risk of price fluctuations as other currencies. Segendorf (2014) contends that the high volatility of the BTC exchange rate makes it inappropriate to preserve its value because doing so will cause purchasing power to decline rapidly. In a sense, the determination of value fluctuations from BTC is the same as that of other goods based on demand and supply (Ausop, 2018). If the demand is high, the value of an item will be high and increase. Other factors that affect value fluctuations include the influence of media outlets that report negative news about BTC (Barker, 2017), which also impacts its price. Moreover, theft and fraud in BTC transactions are risks in utilising this cryptocurrency (Yermack, 2014).

In addition, the market forces of supply and demand determine the price of bitcoin, which means that a variety of factors can greatly affect the price. The public's interest in and demand for Bitcoin significantly increased in 2018, which raised its price to a high level. A number of factors, including increased media attention, a rise in the acceptance of Bitcoin as a valid form of payment, and the possibility of large returns on investment, may have contributed to the surge in demand. As stated in the statement, the price of Bitcoin was initially set at USD65. Although it can fluctuate quickly, at the time of writing, the price of Bitcoin is said to be USD6,281.76, which is equal to RM26,340 (Luqman, 2018). This demonstrates how the price of Bitcoin can change considerably in a short amount of time, so investors should exercise caution when purchasing it.

It's important to note that Bitcoin is a decentralised digital currency that runs separately from established banking infrastructures. Although it has significantly increased in popularity recently, there are still risks involved. Bitcoin is a risky investment because of its high volatility and lack of regulation, which can result in market manipulation. The market's supply and demand determine the price of bitcoin, which is influenced by a number of variables. Even though it has become very popular, it is still important to use caution when investing in cryptocurrencies like Bitcoin because the market can be very unpredictable.

Now, BTC has become known and has a place in the eyes of everyone, including Malaysians. Furthermore, some views state that BTC is a halal currency according to Islamic law (Meera, 2018). The legality of BTC may encourage more Muslims to use it as payment. Hence, BTC can also be used as a zakat payment asset. According to Kahf (2017), BTC is a specific legal currency that does not include any elements of usury (Evans, 2015). Additionally, Adam (2017) asserts that since BTC has a monetary value, it qualifies as currency and is required for zakat.

This scenario makes experts and scientists in various fields worldwide pay special attention to *hakam* law and the risks of using BTC. The *Mufti* of Perlis, Datuk Dr. Mohd Asri Zainul Abidin, stated that any ownership of digital assets is subject to zakat if there is adequate *haul* (storage period) and *nisab* (mandatory rate) (Nurul Amanina, 2020). Since digital currency is both property and currency, the question is, are zakat institutions willing to use BTC transactions to receive zakat? How can BTC be utilised as a tool for paying zakat?

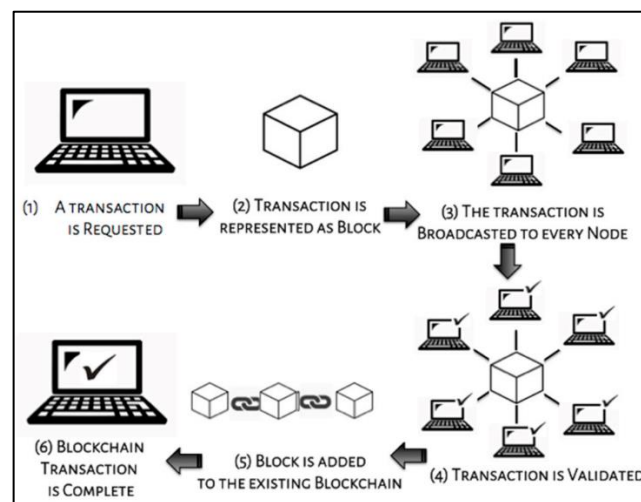
The intersection of bitcoin and zakat has been a subject of growing interest, and the abstract and literature review presented above shed light on several key contributions to the existing literature gap. This study is an exploration of zakat institutions and their acceptance of Bitcoin as a means of receiving zakat. While previous research (Yaakob et al., 2019; Muhammad Amir Husairi and Ahmad Dahlan, 2019; Tektona and Safilia, 2020; Salleh et al., 2019; Beik et al., 2019) has primarily focused on the general permissibility of bitcoin in Islam, this study delves into the practical implications of zakat institutions incorporating bitcoin into their collection strategies, offering valuable insights into the practical implementation of this emerging technology in the context of Islamic financial practices. Unfortunately, it is difficult to find studies that discuss how bitcoin is accepted as a means of paying zakat. The use of bitcoin as a zakat payment tool by zakat institutions is still not clearly discussed by previous research. To fill this gap, this study will dissect how zakat institutions are received by zakat institutions on bitcoin transactions.

This study consideration of the diverse Islamic perspectives on bitcoin adds a critical dimension to the ongoing debate within the Islamic community. By presenting views from both prohibiting and permitting perspectives, the research contributes to a nuanced understanding of the religious implications of using bitcoin as a currency and as a zakat payment asset. Additionally, the introduction of dual methods for calculating zakat on bitcoin provides clarity and alignment with the complexities of cryptocurrency usage. By treating digital currencies in crypto wallets as both savings and investments, this study facilitates a more comprehensive and informed zakat calculation process, further enriching the existing literature.

LITERATURE REVIEW

Bitcoin as a Global Currency

BTC is the most popular virtual currency worldwide. As an alternative payment method to the then-current fiat currencies, BTC was introduced in 2009 (Nakamoto, 2008), which uses blockchain technologies. A blockchain is a decentralised database that keeps an ever-growing list of ordered records, known as blocks, linked together using encryption. Each block has a timestamp, a cryptographic hash of the previous one, and transaction data. Other than that, a blockchain logs transactions across numerous computers to prevent the records from being changed retroactively without changing all succeeding blocks and obtaining network approval. According to Conte de Leon et al. (2017), a blockchain is a way to record digital data through a logbook that includes the following features: ordered, incremental, as well as digitally verifiable. The blockchain also allows both parties to conduct transactions without using third parties, reducing costs (Papadopoulos, 2015). In general, organisational goals and objectives heavily influence any decision to use blockchain (Laurence, 2019).



Source: Idrees et al. (2021)

Figure 1 How Blockchain Works

Bitcoin as a decentralized digital currency, does not rely on any central financial agency for its regulation. Instead, it relies on cryptographic principles and a decentralized network of nodes to validate transactions and maintain the integrity of the blockchain. This lack of central regulation is one of the key features of bitcoin and is often cited as one of its main advantages over traditional currencies. Bitcoin transactions can be conducted peer-to-peer without the need for intermediaries such as banks or payment processors, which can be slower, more expensive, and subject to government regulation. (Meera, 2018; Negurita, 2014). Furthermore, the lack of central regulation can also lead to challenges such as volatility, market manipulation, and security concerns. Therefore, while the decentralized nature of bitcoin offers unique benefits, it also poses certain risks and challenges that need to be carefully considered. The world's first decentralised currency is unique in attracting investors to own and use BTC for payment. In addition, the high price of BTC currency and the ease of conducting transactions through the internet also positively impact the demand for BTC (Sensoy, 2019). According to the Sharia, digital currency is *mutaqawwim*, or property recognised as legitimate property.

Bitcoin From an Islamic Perspective

The amount of digital transactions is rapidly increasing in the modern world. As a result, the financial system has expanded globally. Nevertheless, there are dangers connected to this phenomenon (Mohd Faiz et al., 2019), where Muslim people's and communities' business practices worldwide are also affected.

Islamic scholars have different views on the status of BTC based on the features and functions of the currency discussed in the BTC virtual financial system. Since BTC is *mutaqawwim* and is considered a piece of property, using it as payment is required. However, Mohd Faiz et al. (2019) discusses various academicians' perspectives in regard to this matter. It was discovered that BTC is a new tool that some parties have introduced as a substitute for the nation's current monetary system. Scholars have pointed out three different perspectives in determining the law governing this matter that manifests when there is a difference from their point of view. While some view it as a permissible currency that complies with Islamic principles.

Unlike traditional currencies, which are issued and controlled by governments or central authorities, Bitcoin is not backed by any physical commodity or authority. Instead, it operates on a decentralized network of computers that work together to maintain the integrity of the system. However, the lack of regulation and oversight has also made it a target for hackers and scammers. In addition, the volatility of Bitcoin's value has led some critics to question its suitability as a currency.

BTC defined as a currency that complies with the requirements of a currency and does not contain any components of *gharar* and *jahalah* that could jeopardise this currency transaction. As for the concept of *gharar* and *jahalah*, these are terms used in Islamic finance to describe transactions that involve excessive uncertainty or risk. While Bitcoin does not contain any components of *gharar* or *jahalah*, there is debate within the Islamic finance community about whether or not it complies with the requirements of a currency. Some scholars argue that it is not a true currency because it lacks the backing of a central authority, while others argue that it can be considered a currency because it is used as a medium of exchange.

On the other hand, Kahf (2017) asserts that BTC is a solid currency. According to Evans (2015), BTC is a secure and reliable currency derived from a *riba*. He also mentioned that every unit traded in a BTC transaction is a stable currency. Given that the underlying currency of BTC has a monetary unit, *zakat* must be applied to it (Adam, 2017; Muhammad, 2017). However, according to the banning scholars, BTC is viewed from a macro perspective with expectations of a broader scope. The existence of this currency can jeopardise a nation's currency's stability in addition to the absence of government oversight and control. Utilising BTC is anticipated to result in even more issues with the emergence of fraudulent investment schemes and an easy path for terrorists and cybercriminals. Therefore, it was discovered that they adopted a safer and more cautious approach by gathering as much knowledge as possible about using this currency.

Islamic scholars could not reach a consensus regarding cryptocurrencies, with three different perspectives on the use of cryptocurrencies. Here, the various perspectives would directly determine the cryptocurrency-based *zakat* payment status. The three points of view may be summed up as follows:

Views	Scholar
Prohibiting (<i>haram</i>)	Darul Iftaa' Misriyyah, Syeikh Ali Qaradaghi, Wifaq al-Ulama, Dr. Ahmad Sufyan Che Abdullah, Datuk Dr. Zulkifli Al-Bakri
Permitting (<i>harus</i>)	Datuk Dr. Mohd Daud Bakar, Dr. Zaharuddin and Mufti Muhammad Abu Bakar
Tawaqquf (<i>pending</i>)	International Shari'ah Research Academy for Islamic Finance (ISRA)
official view	

Source: Mohd Faiz et al. (2019); Beik et al. (2019).

Considering the issue of BTC and the Islamic view, it is still new to Malaysia and is undoubtedly still in the research stage among scholars of *muamalat* and Islamic finance. According to a study by Che Mohd Fakhri et. al, (2018), BTC's unstable value has prevented it from being recognised as a legal tender in Islam. The laws governing *nuqud* (gold and silver) will also apply to it, just like fiat money, if it becomes one of Malaysia's recognised forms of currency. This is determined when *nisab zakat*, *riba*, and other calculations are considered. There will still be a few exceptions, like when it is used to pay *zakat* and *waqf*. Apart from that, Islamic scholars are divided into two camps when discussing the status of this virtual currency from an Islamic perspective based on the *maslahah* and *mafsadah* that exist in the BTC virtual financial system. There is no need to use BTC in Malaysia when considering *maslahah* and *mafsadah*, whether a *dharuriyyah* or *hajiyyah* requirement. Its external risk is still high because the mafia and criminals use it as a secure platform for illicit business. In addition, Malaysia is not prepared for BTC transactions due to the lack of public awareness of the currency and the need for additional legal provisions to guarantee each user is protected and under control. Furthermore, Kahf (2017) mentioned that BTC, in particular, is a form of accepted legal tender.

The Calculation on Zakat Bitcoin

Zakat institutions play a crucial role in Malaysia's social and economic landscape, drawing considerable attention from the public, especially the Muslim community (Sapingi et al., 2023). The zakat system, deeply rooted in Islamic principles, is designed to promote social justice and alleviate poverty by redistributing wealth to those in need (Malik, 2016). It serves as an essential pillar of Islamic finance and embodies the values of charity, compassion, and solidarity within the Muslim society. The primary objective of the zakat system is to reduce inequality and achieve socioeconomic stability in Malaysia. As noted by Malik (2016), zakat serves as a mechanism to address the wealth disparity prevalent in society by providing financial support to the less fortunate. By doing so, it empowers the impoverished individuals and families, enabling them to improve their standard of living and break the cycle of poverty.

Moreover, zakat institutions serve as a critical safeguard against the concentration of wealth in the hands of a few individuals or groups. As highlighted by Yusoff (2012), the system ensures that those who have been blessed with wealth share a portion of their assets with those less fortunate. This redistribution of wealth not only fosters a sense of responsibility and empathy among the affluent but also helps in building a more inclusive and cohesive society. Note that zakat is paid to specific beneficiaries (*asnaf*) or *mustahiq*, such as the poor, the needy, the zakat administrator (*amil*), new Muslims (*muallaf*), slaves (*riqab*), debtors for their needs (*gharimin*), in the cause of Allah (*Fi sabilillah*), and travellers for Allah's sake (*Ibnu sabil*). The *asnaf* mentioned above mostly lack the purchasing power to meet their needs. However, there is a minimum requirement to be met to live. As stated in surah Al Baqarah verse 185, "God desires to alleviate your burdens, not hardship for you." The teachings of the Qur'an describe the objective of Sharia to alleviate poverty in society. Furthermore, al-Quran struts Muslims to practice justice in another verse, saying, "Allah commands justice" is found in Surah Al-Nahl, Verse 90:

"Indeed, Allah orders justice and good conduct and giving to relatives and forbids immorality and bad conduct and oppression. He admonishes you that perhaps you will be reminded."

(Quran 16:90)

As a result, it is expected that all Muslims are required to pay zakat to maintain society's viability, following the Quranic verse (al-Hashr:7) that states, "wealth should not only flow between rich people." This indicates that paying zakat is important and can help the poor and needy to increase their economy and survival. Zakat has been shown to have a long-term and short-term impact on economic growth. Other than that, zakat for consumption assistance has had a significant multiplier effect (Suprayitno, 2020). The Caliph Abu Bakr and his companions declared war on any Muslim who refused to pay zakat, as it was paid through the state at the time (*Khilafah*). However, nowadays, Muslims can pay zakat in two ways: directly to the *asnaf* or through a zakat institution, with the latter providing greater benefits.

Zakat is one of the instruments utilised to distribute property among Muslims when it reaches a certain quantity (*nisab*) and time (*haul*). Depending on whether cryptocurrencies are traded or just stored in crypto wallets, there are two standard methods for calculating zakat. The method treats digital currencies stored in crypto wallets like savings in fiat money. Hence, the owner must pay zakat of 2.5 per cent of the total value of cryptocurrencies owned at the end of the year once they have reached the minimum requirement of 85 gm gold (*nisab*) and have full possession for one year (*haul*). The process of trading cryptocurrencies is the next way to determine zakat, with the strategy to approach a cryptocurrency as an investment similar to an equity investment.

METHODOLOGY

Data collection procedures

This research adopts a qualitative approach due to its focus on exploring the experiences of bitcoin players and workers from zakat institutions regarding zakat fund management and bitcoin investment. Qualitative research is suitable for capturing and understanding these experiences in depth (Corbin and Strauss, 2014).

Additionally, utilizing a qualitative route allows for the development and expansion of knowledge in this area of study (Miles and Huberman, 1994).

For data collection, the researchers conducted informal, face-to-face, and semi-structured interviews, which proved to be the most suitable choice for gaining a comprehensive understanding of the respondents' perspectives. The study focused on workers from zakat institutions in Perlis involved in zakat distribution and contribution, as well as bitcoin players with at least one year of experience in bitcoin investment. A total of three bitcoin players and workers from zakat institutions were recruited and interviewed using a snowball sampling technique to find suitable participants. The series of face-to-face, semi-structured interviews took place between early September 2021 and early February 2022. Before the interviews, a set of predetermined questions reflecting the research objectives and findings from the literature review were prepared. A diary was maintained to record the participants' responses, and a voice recorder app was used to transcribe the interviews for data analysis.

During the interviews, a conversational approach was adopted to make the interviewees feel comfortable, encouraging them to share more in-depth and richer data. The researcher also paid attention to behavior cues and body gestures while the participants described their experiences, and the interviews were conducted in both Malay and English, based on the participants' preferences. The interviews were held in office settings and online, with each session lasting for one hour. Following data collection, the researcher employed thematic analysis, as defined by Joffe (2012), to interpret the qualitative data and gain a better understanding of specific patterns, themes, and behaviors related to zakat fund management and bitcoin investment. The responses were carefully coded and organized based on the research objectives.

RESULTS AND DISCUSSION

Zakat Payment Model on Bitcoin Currency

Payment of Zakat in Bitcoin Currency

a) Bitcoin Currency Investment Income

Investors must have profitable cryptocurrency investment results in the current year. The result of the investment must have sufficient zakat requirements, such as sufficient haul (saving period) and *nisab* (mandatory rate) on top of its nature as '*Urudh al-Tijarah*' (traded goods), including the obligatory zakat payment for gold owners. Note that the payment can be made through monetary value or BTC units. Depending on whether a cryptocurrency is traded or kept in a crypto wallet, there are two commonly utilised calculation methods for digital currencies like BTC for zakat payments. The procedure for calculating zakat on cryptocurrency deposits is generally the same as for other types of assets subject to zakat, such as cash or gold. However, there are some specific considerations that need to be taken into account when calculating zakat on cryptocurrency.

According to Islamic law, zakat is only obligatory on an individual if they have achieved the minimum requirement of 85 grammes of gold (*nisab*) and have held the assets in question for at least one lunar year (*haul*). If an individual does not meet these requirements, they are not obligated to pay zakat on their cryptocurrency holdings. Once an individual meets the *nisab* and haul requirements, they can calculate their zakat obligation on their cryptocurrency holdings. This would involve determining the total value of their cryptocurrency holdings on the day that zakat is due, and then paying 2.5 percent of this value as zakat. The second method based on Figure 2.

$$[(\text{Lowest value of BTC units in one year} \times \text{number of BTC units}) + \text{trading profit throughout the year}] \times 2.5\%$$

Source: Jabatan Mufti Negeri Perlis (2020)

Figure 2 The zakat calculation method for traded bitcoin (BTC) digital assets is

b) Zakat Payment Through "Payment Gateway"

For investors who want to pay zakat directly to the zakat institutions in cryptocurrency, payments can be made through payment gateway transactions. A payment gateway is a payment method that helps sellers and buyers transact online, for example, through money transfers between banks, credit cards, and e-wallets. Payment gateways are also applied in cryptocurrency transactions. Among the payment gateways often used in transactions in the form of cryptocurrency in Malaysia is coin payment. Coin payment is an online wallet and trading platform. Its' function is to access investors' wallets, make transactions (buy, sell, and trade) and receive payments instantly. Therefore, for payment through the payment gateway, zakat institutions need to register an account with the payment gateway. Note that every zakat payment through cryptocurrency will go into the wallet belonging to the zakat institution under the payment gateway. The zakat institution can transfer the cryptocurrency from the payment gateway to the cold wallet.

c) Bitcoin Currency Zakat Transfer and Receipt Transactions

After the payment is made through a payment gateway transaction such as a coin payment, the cryptocurrency ownership is transferred from the investor to the zakat institution. As mentioned, the transferred payment rate is similar to the zakat cryptocurrency calculation.

d) Storage of Bitcoin Currency

Cryptocurrencies received by zakat institutions must be kept in special storage. Therefore, zakat institutions need storage devices with high security, such as cold wallets, against digital threats. A cold wallet is a physical storage wallet that stores cryptocurrency offline. Here, several cold wallets can be chosen, including paper and hardware wallets. However, hardware wallets are more suitable for zakat institutions to store cryptocurrencies.

Sales of Zakat in Bitcoin Currency

a) Sales on Cryptocurrency Platforms

In order to get fiat currency to be distributed to the eight qualified *asnaf* groups, a cryptocurrency exchange needs to be done. Exchange can be done by selling cryptocurrency to other investors. Hence, zakat institutions need to have a wallet or account on a digital asset trading platform registered under the Securities Commission Malaysia (SC) for the sale transaction. Some of the registered trading platforms include Luno Malaysia, MX Global, SINEGY, and Tokenize Technology.

b) Acceptance of Fiat Currency

When the cryptocurrency purchase agreement between the zakat institution and the investor occurs, investors need to transfer the agreed amount of money to the trading platform (for example, Luno). Thus, the money received by the zakat institution needs to be transferred to the bank account of the zakat institution to withdraw fiat currency. Here, cryptocurrency-to-fiat currency exchange transactions occur.

c) Distribution of Zakat to Eight Groups of Deserving People

Zakat institutions can distribute the money received to eight eligible *asnaf* groups mentioned in Surah At-Taubah, verse 60.

"Zakat is for the needy and the poor, and for the amil (those in charge of managing the funds), for the muallaf (those who have embraced Islam), for those who are in servitude and debt, for those who fight for Allah and for the wayfarer; (thus it is) ordained by Allah, and Allah is full of knowledge and wisdom."

Can Bitcoin be used for Zakat Payment?

There are eight eligible *asnaf* groups:

i. *Fakir*

A person who suffers and lacks the means to meet his or her daily needs. One who has neither material possessions nor means of support.

ii. *Miskin*

A person who has insufficient means of livelihood to meet his/her basic needs.

iii. *Fisabilillah*

A person who works to advance society while advancing in the cause of Allah. Disbursement to *Fisabilillah* includes religious programs, mosque leadership and management, as well as *dakwah* and public education.

iv. *Gharimin*

A person in debt requires help to meet their basic needs. Payment for *Gharimin* includes support for unpaid bills for basic necessities, such as utility, service, and conservancy fees.

v. *Riqab*

A person who releases themselves from the bonds of slavery or servitude. In Singapore, this group includes those who require some help to continue their education, typically the offspring of zakat recipients. Education grants are part of the *Riqab* disbursement for low-income families.

vi. *Muallaf*

A person who recently embraced Islam.

vii. *Amil*

A person who is designated to collect zakat and the costs associated while administering zakat. *Amil* will receive payment for administrative and training expenses.

viii. *Ibnussabil*

Stranded travellers on an authorised trip. *Ibnussabil* received financial support, food assistance, and a return flight home as part of the disbursement.

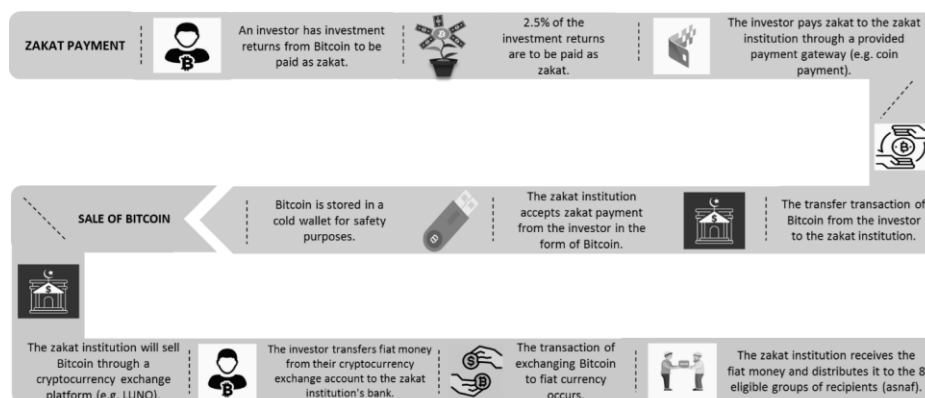


Figure 3 Zakat Payment Model on Cryptocurrency

CONCLUSION AND LIMITATIONS

Zakat is one of the five pillars of Islam and is an obligation for all financially able Muslims. It is a form of charitable giving, where a portion of a person's wealth is donated to the needy. The calculation of zakat is based on the individual's assets, including cash, gold, and other assets. With the rise of digital currencies such as bitcoin, there has been some debate among Islamic scholars on whether they should be subject to zakat. However, many fiqh-based arguments suggest that cryptocurrency is an asset (*maal*) and therefore subject to zakat, similar to cash and gold.

Calculating zakat for bitcoin is similar to calculating zakat for other assets. The zakat rate is typically 2.5% of the total value of assets that have been in one's possession for a full lunar year. Using blockchain technology to pay zakat can provide a more efficient and transparent process. Blockchain technology provides a tamper-proof and decentralized ledger that can be used to verify transactions, reducing the risk of fraud or errors. It can also help to track and manage zakat payments, ensuring that the funds are being used for their intended purpose. The use of BTC and blockchain technology can help to make the zakat payment process more efficient, dependable, manageable, and significant. However, it is ultimately up to individual stakeholders to decide whether they want to participate actively in this change and adopt these technologies for zakat payments.

This paper highlights that with the increasing popularity of bitcoin BTC as a cryptocurrency and the rapid development of technology, there has been a shift in the payment methods for zakat. Zakat is a compulsory payment made by Muslims who meet certain criteria, and it is typically paid using fiat currency. However, with the rise of bitcoin BTC, the paper suggests that there may be a shift towards paying zakat using digital currency. The findings of this research suggest that the use of bitcoin BTC currency could increase zakat income, as more people become aware of the option to pay zakat using this currency. This could be particularly beneficial in areas where access to traditional banking services is limited, and where digital currencies like bitcoin BTC offer a more accessible and efficient means of payment. Moreover, this paper suggests that the shift towards digital currencies like bitcoin BTC could have broader implications for the global economy and financial services. As more people begin to use digital currencies, there may be a shift away from traditional banking systems and towards more decentralized and secure payment methods. This could have implications for governments and financial institutions, as they seek to regulate and manage these new forms of currency.

From a theoretical perspective, the paper contributes to our understanding of the role of digital currencies like bitcoin BTC in religious practices such as zakat payment. It also highlights the potential for these currencies to transform traditional payment methods and the broader financial system. From a practical perspective, the paper suggests that zakat institutions should consider offering payment options using digital currencies like bitcoin BTC to better serve their constituents. Additionally, efforts should be made to increase awareness and understanding among bitcoin BTC traders about the importance of paying zakat, and to facilitate the payment process to make it as seamless and efficient as possible.

To effectively accept cryptocurrency transactions as zakat payments, zakat institutions must have clear guidelines in place. Here are some details that can be included in these guidelines:

1. Determine the types of cryptocurrency that will be accepted for zakat payments. While Bitcoin is the most popular cryptocurrency, there are many other types of cryptocurrencies that exist. Zakat institutions should decide which ones they are willing to accept.
2. Establish a process for verifying the authenticity of the cryptocurrency. Before accepting a cryptocurrency transaction, zakat institutions should ensure that the transaction is legitimate and the cryptocurrency is not stolen or acquired through illicit means. This can be done by verifying the transaction on the blockchain.
3. Set a minimum zakat payment amount for cryptocurrency transactions. The value of cryptocurrencies can be volatile, and the transaction fees can be high. Therefore, it may not be practical to accept very small cryptocurrency payments as zakat. Zakat institutions should decide on a minimum amount that makes sense for them.
4. Decide on the timing of the zakat payment. Zakat is due once a year, but cryptocurrency transactions can be processed instantly. Zakat institutions should decide whether they will accept cryptocurrency zakat payments throughout the year or only during the zakat collection period.

5. Establish a system for converting cryptocurrency to local currency. While some merchants may accept cryptocurrencies directly, many still prefer to be paid in their local currency. Zakat institutions should have a system in place for converting the cryptocurrency to the local currency.
6. Ensure compliance with regulatory requirements. Cryptocurrencies are still a relatively new asset class, and regulatory requirements may vary by jurisdiction. Zakat institutions should ensure that they are complying with all applicable laws and regulations when accepting cryptocurrency transactions.

By having clear guidelines in place, zakat institutions can effectively accept cryptocurrency transactions as zakat payments and stay ahead of the curve in the rapidly evolving world of digital finance. Finally, the results obtained in this study should be interpreted in light of certain limitations of the sample size and scope of research. Although there are certain limitations, this research makes a valuable contribution to the literature by investigating the intersection of bitcoin and zakat, shedding light on the potential acceptance of bitcoin by zakat institutions, and considering the Islamic perspective on cryptocurrencies. To further validate and expand upon these findings, future research could benefit from a larger and more diverse sample, a longitudinal design, and more rigorous statistical analysis. Additionally, a comparative study between zakat institutions that adopt bitcoin as a means of receiving zakat and those that do not would be valuable. Such a study could explore differences in zakat collection efficiency, transparency, and impact on beneficiaries between the two approaches, providing meaningful insights for zakat institutions and policymakers. Conducting this kind of research would enhance our understanding of the implications of incorporating bitcoin into the zakat system and offer valuable guidance for decision-makers in the zakat domain.

REFERENCES

- Adam, F., 2017. *Bitcoin: Shariah Complaint?*. available at www.afinance.org. accessed on 4 February 2023.
- Ausop, A. Z. and Aulia, E. S. N., 2018. Teknologi Cryptocurrency Bitcoin Dalam Transaksi Bisnis Menurut Syariat Islam. *Jurnal Sositologi*, 17(1), pp. 74-92.
- Barker, J. T., 2017. *Why Is Bitcoin's Value So Volatile?* available at <https://www.investopedia.com/articles/investing/052014/why-bitcoins-value-so-volatile.asp>. accessed on 4 February 2023.
- Beik, I. S., Nurzaman, M. S. and Sari, A. P., 2019. *Zakat Standard Framework of Halal Cryptocurrency*. In *Halal Cryptocurrency Management* (pp. 275-284). Palgrave Macmillan, Cham.
- Che Mohd Fakhri Che Ludin, Muhamad Hafiz Fahmi Ahmad Sukri, Muhammad Ridzuan Dolah and Atif Aiman Abd Halim., 2018. Bitcoin: Analisis Bitcoin melalui Muamalat dan Maşlahat. *ISES4101 Ijtihad dalam Isu-isu Sains dan Pemikiran Saintifik*, available at <https://dl1wqtxts1xzle7.cloudfront.net/> (accessed on 4 March 2023).
- Chohan, U. W., 2018. *Bitconnect and Cryptocurrency Accountability*. available at <http://dx.doi.org/10.2139/ssrn.3131512>. accessed on 19 March 2023.
- Conte de Leon, D., Stalick, A. Q., Jillepalli, A. A., Haney, M. A. and Sheldon, F. T., 2017. Blockchain: properties and misconceptions. *Asia Pacific Journal of Innovation and Entrepreneurship*, 11(3), pp. 286-300.
- Corbin, J. and Strauss, A., 2014. *Basics of qualitative research: techniques and procedures for developing grounded theory (4th ed.)*. Thousand Oaks, CA: Sage Publications
- Evans, C. W., 2015. Bitcoin in Islamic Banking and Finance. *Journal of Islamic Banking and Finance*, 3, pp. 1-11.
- Grant, G. and Hogan, R., 2015. Bitcoin: Risks and controls. *Journal of Corporate Accounting & Finance*, 26(5), pp. 29-35.
- Idrees, S. M., Nowostawski, M., Jameel, R. and Mourya, A. K., 2021. Security aspects of blockchain technology intended for industrial applications. *Electronics*, 10(8), p. 951.
- Joffe, H., 2012. Thematic analysis. Qualitative research methods in mental health and psychotherapy. *A Guide for Students and Practitioners*, 1, pp. 210-223.
- Kahf, M., 2017. How Does Islam View Bitcoin and Other Cryptocurrencies, available at <http://aboutislam.net/counseling/ask-thescholar/financial-issues/islam-view-bitcoincryptocurrencies/>. accessed on 15 March 2023.

- Laurence, T., 2019. *Introduction to blockchain technology*. Van Haren.
- Luqman, T., 2018. Bayan Linnas Siri Ke-153: Hukum Penggunaan Mata Wang Bitcoin, available at <https://muftiwp.gov.my/artikel/bayan-linnas/2773-bayan-linnas-153-hukum-penggunaan-mata-wang-bitcoin>. accessed on 15 March 2023.
- Malik, B. A., 2016. Philanthropy in practice: role of zakat in the realization of justice and economic growth. *International Journal of Zakat*, 1(1), pp. 64-77.
- Meera, A. K. M., 2018. Cryptocurrencies from Islamic Perspective: The Case of Bitcoin. *Bulletin of Monetary Economics and Banking*, 20(4), pp. 475-492.
- Miles, M. B. and Huberman, A. M., 1994. *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks, CA: Sage Publications.
- Mohd Faiz, M. Y., Aliff, N. and Raja Rizal Iskandar, R. H., 2019. Persediaan Institusi Zakat Menggunakan Mata Wang Kripto (Bitcoin). *International Journal of Zakat and Islamic Philontology*, 1(2), pp. 138-150.
- Mohd Yaakob, M. F., Nawi, M. and Raja Hisham, R. R. I., 2019. Risiko dan Kesediaan Institusi Zakat Dalam Penerimaan Transaksi Bitcoin. *Journal of Fatwa Management and Research*, 17(2), pp. 60-70
- Muhammad Amir Husairi, C. R. and Ahmad Dahlan, S., 2019. Analisis Syariah Terhadap Kedudukan Bitcoin Sebagai Alat Pembayaran. *Journal of Contemporary Islamic Law*, 4(2), pp. 46-64
- Muhammad, M., 2017. *Shari'ah Analysis of Cryptocurrency: Bitcoin*. Petaling Jaya: Shariah Fintech Forum (SFF) 2017, 8 November 2017.
- Nakamoto, S., 2008. Bitcoin: A Peer-to-Peer Electronic Cash System. available at www.cryptovest.co.uk. accessed on 15 March 2023.
- Negurita, O., 2014. Bitcoin-Between Legal and Financial Performance. *Contemporary Readings in Law and Social Justice*, 6(1), pp. 242-248.
- Nurul Amanina, S., 2020. *Fatwa Bitcoin jika cukup syarat - Mufti Johor*. available at <https://www.hmmetro.com.my/mutakhir/2020/02/545514/fatwa-bitcoin-jika-cukup-syarat-mufti-johor>. accessed on 15 March 2023.
- Nurulain Atiqah Zain Azmi and Aisyah Abdul-Rahman., 2018. Kesedaran Pelajar Terhadap Risiko Bitcoin. *Jurnal Personalia Pelajar*, 21(1), pp. 67-77
- Papadopoulos, G., 2015. Blockchain and digital payments: an institutionalist analysis of Cryptocurrencies. In *Handbook of digital currency* (pp. 153-172). Academic Press.
- Perez, Y. B., 2015. *Mt Gox: The History of a Failed Bitcoin Exchange*. available at <https://www.coindesk.com/markets/2015/08/04/mt-gox-the-history-of-a-failed-bitcoin-exchange/>. accessed on 15 March 2023.
- Safitri, E. and Putranti, I. R., 2019. Kebijakan Melegalisasi Cryptocurrency Sebagai Upaya Pemerintah Jepang Mengamankan Keamanan Nasional Jepang. *Journal of International Relations*, 5(2), pp. 271-280.
- Salleh, W. N. A. W. M., Rasid, S. Z. A. and Basiruddin, R., 2019. Towards Transforming Zakat Collection and Distribution Roles Using Digital Wallet in Support of Social Justice and Social Financing. *Open International Journal of Informatics (OIJI)*, 7(2), pp. 95-103.
- Sapingi, R., Nelson, S. P. and Obid, S. N. S., 2023. Assessing The Extent of Disclosure and Information Asymmetry in Malaysian Zakat Institutions. *International Journal of Economics and Management*, 17(1), pp. 1-18.
- Sat, D. M., Krylov, G. O., Evgenyevich, K., Bezverbnyi, B., Kasatkin, A. B. and Kornev, I. A., 2016. Investigation of Money Laundering Methods through Cryptocurrency. *Journal of Theoretical and Applied Information Technology*, 83(2), pp. 244-254.
- Segendorf, B., 2014. What is bitcoin. *Sveriges Riksbank Economic Review*, 2.
- Sensoy, A., 2019. The Inefficiency of Bitcoin Revisited: A High-Frequency Analysis with Alternative Currencies. *Finance Research Letter*, 28, pp. 68-73.
- Suprayitno, E., 2020. The Impact of Zakat on economic growth in 5 State in Indonesia. *International Journal of Islamic Banking and Finance Research*, 4(1), pp. 1-7.
- Tektona, R. I. and Safilia, N. U., 2020. Penggunaan Bitcoin Sebagai Alat Pembayaran Zakat Menurut Perspektif Hukum Islam. *Jurnal Hukum dan Kemanusiaan*, 14(1), pp. 27-40.
- Vejačka, M., 2014. Basic aspects of cryptocurrencies. *Journal of Economy, Business and Financing*, 2(2), pp. 75-83.

- Yaakob, M. F. M., Nawi, M. A. M. and Hisham, R. R. I. R., 2019. Persediaan Institusi Zakat Menggunakan Mata Wang Kripto (BITCOIN). *International Journal of Zakat and Islamic Philanthropy*, 1(2), pp. 138-150.
- Yermack, D., 2015. Is Bitcoin a real currency? An economic appraisal. In *Handbook of digital currency* (pp. 31-43). Academic Press.
- Yusoff, M. B., 2012. Zakat distribution and growth in the federal territory of Malaysia. *Journal of Economics and Behavioral Studies*, 4(8), pp. 449-456.
- Ziegler, S., 2018. *Innovative Legislation is Necessary to Address Terrorist & Criminal Use of Cryptocurrency*. available at <http://dx.doi.org/10.2139/ssrn.3326151>. accessed on 13 March 2023.