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Examining the Adoptability of Cryptocurrency in the Islamic Financial System: Perspectives from Sharīʿah Scholars

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Abstract. This study explores the adoptability of cryptocurrency within the Islamic financial system, a topic of substantial debate among scholars and practitioners. Given the decentralized nature of cryptocurrency, its acceptance within the conventional and Islamic financial systems presents unique challenges. To ascertain the legitimacy and possible adoptability of cryptocurrency under Sharīʿah law, this paper employs qualitative research methods, using in-depth interviews of twenty-four Sharīʿah scholars. These scholars, selected through purposive and snowball sampling techniques, possess expert knowledge of both cryptocurrency and the Islamic financial system. The results revealed that the acceptability of cryptocurrency in Sharīʿah-compliant financial systems is contingent on its centralization and its function as a store of value, aligning with the objectives (*maqasid*) of Sharīʿah. Cryptocurrency's lack of intrinsic value necessitates its backing by a central authority or asset to mitigate risks and potential fraud. This research offers valuable insights into the considerations required for cryptocurrencies' adoption in Islamic finance, contributing to the ongoing debate on their legitimacy under Sharīʿah law.

Keywords: Cryptocurrency, Sharīʿah Law, Centralization, Store of Value, *Maqasid al-Sharīʿah*

JEL Classification*:* E40, E42, E58, G23, G28
KAUJIE Classification*:* B4, B5, Q11, Q23, Q5

1. Introduction

The evolution of money has been marked by numerous technological and systemic advances, with one of the most significant in recent times being the advent of cryptocurrency. Bitcoin, the first cryptocurrency, was invented in 2008 following the global financial crisis and has since transformed the notion of financial transactions (European Central Bank, 2012; International Monetary Fund, 2016; Dwyer, 2015). The Bitcoin system, proposed by an unknown person or group of people under the pseudonym Satoshi Nakamoto, introduced the concept of a decentralized and cryptographic secure form of digital money (Nakamoto, 2008). This revolutionary idea has since been adopted by other cryptocurrencies, transforming the economic landscape by enabling peer-to-peer transactions that bypass traditional financial intermediaries.

The application of blockchain technology, which serves as a public ledger for cryptocurrency, has since permeated various sectors, fostering transparency and security in payment systems. This technological leap has paved the way for the inclusion of previously unbanked individuals in economic activities. Despite its promising potential, cryptocurrency is marred by significant concerns, ranging from vulnerability to hacking, the volatility of its value, its use for illicit activities, and its seeming disconnect from central regulatory authorities (Wolla, 2018; Hill, 2014; Sahoo, 2017; Grinberg, 2011; Yussof and al-Harthy, 2018; Velde, 2013; Foley et al., 2019). These concerns have led to cryptocurrencies being frequently employed as speculative investments rather than being utilized as a medium of exchange, primarily due to their extreme volatility (Yermack, 2015; Lo and Wang, 2014; Baur and Dimfle, 2018).

Within the context of the Islamic financial system, the adoption of cryptocurrency faces unique challenges. Scholars such as Meera (2018), Alzubaidi & Abdullah (2017), and Nurhisam (2017) have opposed the decentralization of cryptocurrency, highlighting the potential for anarchy, societal chaos, and lack of accountability. Central to Islamic finance are the concepts of *gharar* (uncertainty), *maysir* (gambling), and the overarching objective of *maqasid al-Sharīʿah*, which refers to the achievement of societal benefits and prevention of harm (Meera, 2018; Bakar et al., 2017; Hameed, 2009; al-Razi, 1981; Uddin, 2015; Dusuki & Bouheraoua, 2011). Given these principles, the adoption and legitimization of cryptocurrency necessitates a careful examination against these tenets.

This paper aims to bridge the knowledge gap between religious scholars and modern financial systems by examining the adoptability of cryptocurrency in the Islamic financial system, focusing on major characteristics highlighted by Muslim scholars. While the legitimacy of a financial instrument in Islam ultimately rests with the *fuqahā*, this study provides an in-depth exploration of the intersection between Islamic financial principles and the characteristics of cryptocurrency. It is hoped that the findings from this study will contribute to the ongoing discourse and facilitate an informed assessment of the role of cryptocurrency within the Islamic financial system.

2. Literature Review

Scholars have extensively examined the definition and functions of money within the framework of the Qur'ān, the Sunnah, and the writings of early Muslim scholars, grounding their discussions in foundational Islamic texts. The Qur'ān, for instance, acknowledges the human inclination towards gold and silver, portraying these metals as fulfilling various monetary functions. Verses such as Qur'ān 3:14 and 3:75 highlight gold and silver as units of account, standards of deferred payment, and stores of value, which have historically underpinned the stability and reliability of monetary systems in Islamic societies.

The historical introduction of *fulus* (copper coins) to meet the societal demand for smaller denominations provides a practical example of how deviations from gold and silver standards can lead to economic instability. The widespread circulation of *fulus* caused a scarcity of gold dinars and silver dirhams, leading to fluctuations in coin values and economic disruptions. This crisis was addressed by Caliph Nasir Hasan's decisive action to invalidate *fulus*, stabilizing the economy—a move that was later supported by scholars like Al-Maqrizi, who advocated for the exclusive use of gold and silver as currency to maintain economic stability and prevent inflation (Rosly and Barakat, 2002).

A comparative analysis of the monetary philosophies of Ibn Taymiyyah and Imam Ghazali reveals a shared vision for an ideal monetary system that aligns with Islamic principles. Both scholars emphasized that money should function primarily as a medium of exchange rather than as a commodity with intrinsic utility. They argued that money, as a measure of value, should possess a stable and fixed value to ensure fairness in transactions. Additionally, they advocated for the free circulation of money within the economy, warning against hoarding, which would undermine its role in facilitating trade and economic activity. Their perspectives highlight a commitment to a monetary system that promotes equity, stability, and the efficient allocation of resources in accordance with Islamic ethical guidelines (Firdaus, 2020).

The transition from metal-based currencies to paper money, first emerging in medieval China during the reign of Emperor Zhenzong, marked a significant shift in monetary history. Vadillo (2006) outlines the evolution of paper money through three distinct stages: the initial issuance of promissory notes by banks, the gradual assumption of this role by governments or central banks, and the final stage, characterized by the complete detachment of currency from physical commodities following the abolition of the Bretton Woods agreement in 1971. This shift to fiat currency, while solving certain logistical issues in monetary exchange, introduced new challenges, particularly in terms of inflation, market bubbles, and economic instability.

Kameel and Larbani (2006) critique fiat currency, arguing that its creation without backing by precious metals leads to various economic problems, including inflation, amplified business cycles, increased unemployment, and rising inequality. They highlight the vulnerability of developing nations to currency speculation and manipulation by developed countries, exacerbated by the ease of electronic money transfers and the dominance of developed nations' currencies in international trade. Furthermore, they argue that the modern paper money and banking system is fundamentally based on *ribā* (usury), identifying the devaluation of

fiat money, interest on borrowed money, and fractional reserve banking (FRB) as aspects that contribute to this. These practices are contrary to Islamic principles, making fiat money and FRB potentially *haram* (prohibited) under Sharīʿah.

Vadillo (2006) extends this critique by arguing that fiat currency is inherently fraudulent, as it forces people to accept something with no intrinsic value—paper money—whose true worth is effectively zero. The compulsory acceptance of fiat currency through legal tender laws, he contends, violates the principles of a fair contract under Sharīʿah. In contrast, gold and silver are seen as compliant with Sharīʿah because they lack these fundamental flaws and have intrinsic value.

Despite these critiques, Hasan (2008) argues that the scale of modern financial transactions, with trillions of dollars circulating daily in global markets, makes a return to a gold-backed currency impractical. However, while acknowledging the scale of modern financial markets, one might question the desirability of such speculative activities from an Islamic perspective. If reintroducing gold and silver money could reduce speculative transactions, often linked to *gharar* (excessive uncertainty) and *maysir* (gambling), it might be more aligned with Sharīʿah principles.

The debate surrounding the permissibility of paper money in Islamic finance had not yet been fully resolved when the advent of bitcoin in 2008 introduced a new layer of complexity. Bitcoin, a decentralized peer-to-peer virtual currency, marked a significant shift in the conceptualization of money. According to Lee et al. (2015), cryptocurrencies like bitcoin are decentralized systems that represent digital value, allowing for transfer, storage, and trade without the need for intermediaries such as banks or central authorities. This independence from traditional financial systems distinguishes cryptocurrencies from other digital payment methods (e.g., PayPal, Facebook credits) and raises new questions about their role and status in both conventional and Islamic financial frameworks.

Bitcoin operates on principles of cryptography, securing transactions and controlling the currency's production. Each bitcoin and user are encrypted with a unique identity, and all transactions are recorded on a decentralized public ledger known as a blockchain. This system ensures transparency and security while maintaining the anonymity of the users involved (Bohme et al., 2015). The potential of bitcoin to become a widely accepted medium of payment is supported by several scholars (Rose, 2015; Stroukal, 2018; Singhal and Rafiuddin, 2014), who cite its transparency, security, lower transaction costs, resistance to counterfeiting, limited supply, and potential utility in crisis-prone nations (Yussof and Al-Harthy, 2018).

However, bitcoin's innovative features also present significant challenges. While the absence of a central authority creates opportunities for secure, independent, and low-cost transactions, it also introduces risks, particularly in terms of volatility and regulatory concerns. The decentralized nature of bitcoin allows for the inclusion of unbanked individuals into the global economy, yet the same lack of oversight raises concerns about its long-term stability and compliance with Islamic principles (Yuneline, 2019).

Yuneline (2019) argues that bitcoin meets six out of the seven traditional characteristics of money—homogeneity,

divisibility, mobility, durability, rarity, and stability of value—although the latter is questionable given bitcoin's notorious price volatility. The stability of value is a crucial criterion for money, and bitcoin's failure to maintain a consistent value diminishes its effectiveness as a store of value, unit of account, and medium of exchange (Kubát, 2015). This volatility not only weakens bitcoin's function as a currency but also transforms it into a speculative asset, which is challenging from an Islamic financial perspective that prohibits excessive uncertainty (*gharar*), gambling (*maysir*), and hoarding.

Furthermore, bitcoin's inability to integrate with existing financial systems limits its utility as a currency. It cannot be deposited in banks, lacks insurance protections for its holders, and is not used as a unit of account in standard consumer finance transactions, such as auto loans or mortgages. Additionally, no debit or credit cards are denominated in bitcoin (Yermack, 2013), further restricting its use in everyday economic activities.

In the realm of Islamic finance, the debate over the legitimacy and adoptability of cryptocurrency has gained significant momentum. The Sharīʿah, as explicated by al-Ghazali, aims at promoting the welfare of people by safeguarding their faith, life, intellect, property, and prosperity. The characteristics intrinsic to cryptocurrency have stirred an expansive debate among Islamic scholars about its conformity with Sharīʿah principles.

Alzubaidi and Abdullah (2017) argued that cryptocurrency is devoid of any elements prohibited by Islam, largely attributable to its roots in mathematical and computational applications. The transparent and robust authentication process, which is fundamental to cryptocurrency transactions, eradicates any ambiguity, making these transactions more trustworthy. There exists a considerable body of scholarly work that supports the acceptance of cryptocurrency under Islamic law. Notable proponents of this view include Muedini (2018), Evans (2015), Abu-Bakar (2018), and Paracha (2018). They posit that cryptocurrency is Sharīʿah-compliant as it holds monetary value, attains *maqasid al-Sharīʿah* (the objectives of Sharīʿah), and is free from *ribā* (interest).

However, the consensus is far from universal. Opposing views are held by Adam (2017), Febriandika and Sukmana (2018), and Naz and Nazir (2022) who argued that cryptocurrencies like Bitcoin fall short of fulfilling the criteria for Sharīʿah-compliant money. Other critics include Meera (2018) and Bakar et al. (2017), who raised concerns about cryptocurrencies compromising *maqasid al-Sharīʿah* due to their decentralized nature and potential involvement in *maysir* (gambling) and *gharar* (uncertainty).

The primary data collection of fatwas by Naz and Nazir (2018) on the Sharīʿah-legitimacy of cryptocurrency is a study that is particularly pertinent to our investigation. However, the present study distinguishes itself by using an open-ended questionnaire to collect in-depth information from Sharīʿah experts through individual interviews. This approach offers a more nuanced understanding of the major features of cryptocurrency in the light of Sharīʿah, thus filling a gap in the literature and providing a more detailed analysis of the issue.

3. Research Methodology

This study employs a qualitative research approach to derive in-depth information on the topic from informed respondents (Zuell

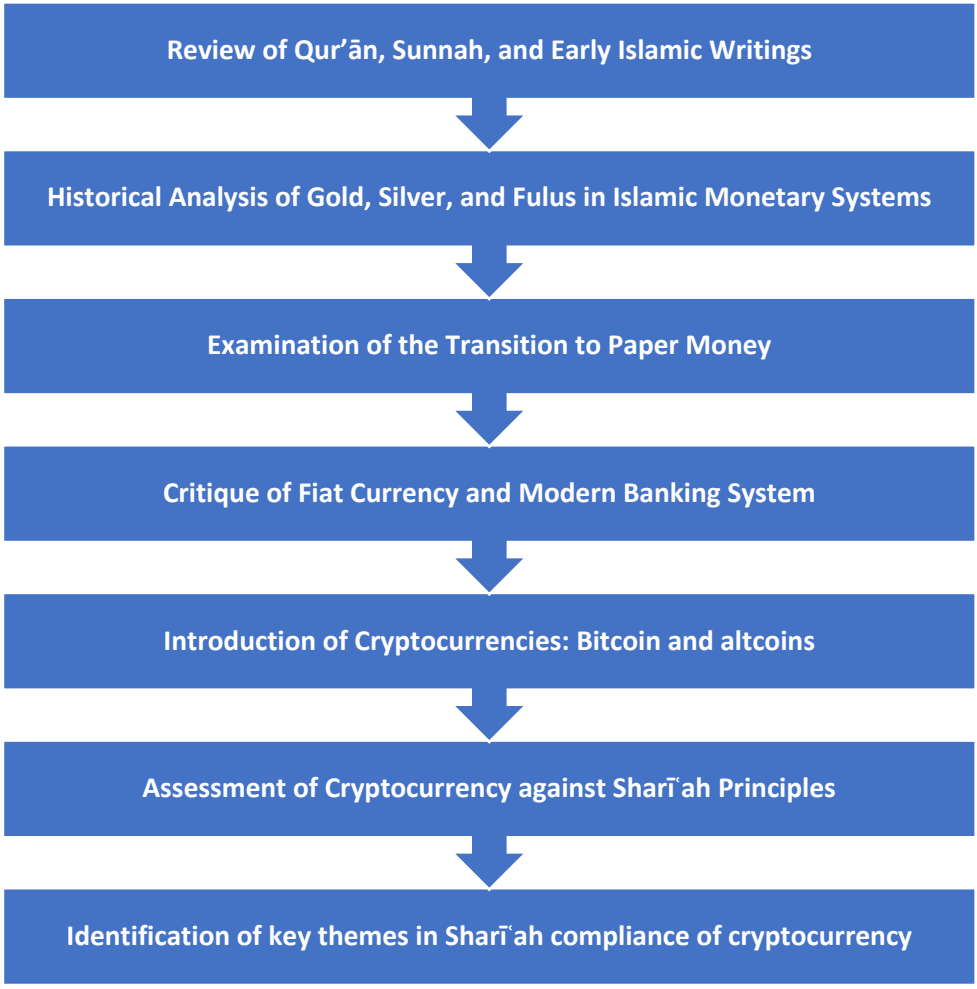
et al., 2015). By conducting individual interviews, rich, descriptive responses as suggested by (Israel, 2010; Smyth et al., 2009) were obtained to explore the intricacies of cryptocurrency adoption within the Islamic financial system. The interview design incorporated a blend of close-ended and open-ended questions, leveraging the latter's potential to generate fresh, valuable insights not anticipated by researchers (Gurel et al., 2015; Wong et al., 2012; Kember et al., 2008, Schonlau & Couper, 2016). Respondents articulated their responses in their own words, in line with methodologies proposed by Lee & Lutz (2016) and Popping (2015), thus providing unique perspectives on the issue.

Given the novelty of cryptocurrency and the niche focus on its Sharīʿah compliance, respondent selection was not random. Instead, purposive and snowball sampling techniques were adopted to access experts with a solid understanding of both cryptocurrency and the Islamic financial system (Morgan et al., 1998; Johnson, 2014). The interview series progressed until a saturation point was reached, where no further significant information was forthcoming, resulting in a sample size of 24 respondents (Weller et al., 2018). The respondents resided in distant areas. Based on the initial information, Karachi, Lahore, and Islamabad were considered to have more educated and relevant field experts. In this regard, education qualifications, the nature of the job, and job experience were the key aspects considered in their selection. Given geographical constraints and restrictions due to the Covid-19 pandemic, the interviews were conducted electronically and telephonically. Electronic questionnaires allowed respondents to share their insights at their own pace, while telephonic interviews were audio-recorded to ensure accurate capture of information (Bolarinwa, 2015). In the latter, the respondents' answers were carefully recorded and transcribed.

Analysis of the open-ended questions incorporated the use of descriptive counts and graphs, as according to Dey (1993), numerical representation of information reveals clearer patterns. To further enhance the precision of quantitative claims in this qualitative research, quasi-statistics were employed, as suggested by Becker (1970) and Sandelowski et al. (2009). To delve into the operational aspects of cryptocurrency and the issues it encounters in achieving Sharīʿah compliance, an extensive review of relevant literature was conducted. Key challenges were identified and incorporated into the interview design. This holistic approach aimed to elicit expert insights on cryptocurrency's potential adoptability in a Sharīʿah-compliant financial system.

To discuss the nature and working of cryptocurrency, a thorough reading of the literature helped the authors sort out the main issues confronting the currency to fulfill Sharīʿah compliance as highlighted in figure 1. These issues have all been tabulated and incorporated into the interview.

Figure -(1)- Literature Review Process for Identifying Key Themes in Cryptocurrency Adoption within Sharīʿah-Compliant Financial Systems



Source: Developed by the authors

4. Main Findings and Discussion

Because of the new nature of cryptocurrency, the respondents to the individual interview must be experts in the fields of Sharīʿah law, economics, and finance. The qualifications, occupation, and job experience of the respondents are counted and narrated as follows:

The academic qualifications of the respondents have shown that most of the respondents (83%) had a master's degree with specialization in either Sharīʿah law, economics, or Islamic banking, or finance. The number of respondents with PhD degrees in Islamic Economics and Islamic Finance was 17%. The qualification thus fulfills the requirement to discuss the issue and get their opinion.

The occupation of the respondents is another aspect that helped to get a sound opinion from the field. Among the total, 42% of respondents were performing their services as academicians and were affiliated with different academic institutions in the required field, while 37% were bankers. About 8% of respondents were performing their services as both bankers and academicians. About 13% of

respondents held a position as either a Sharīʿah advisor or Sharīʿah officer at different institutes. Thus, the data shows their field of expertise in understanding the emerging issues.

The experience of the respondents has also been considered. Most of the respondents (42%) had 6–15 years of job experience in the relevant area. About 33% of respondents had 1-5 years of experience, while 25% had been working for more than 15 years. Thus, about 67% of respondents had good experience (more than five years) in the field mentioned above.

The questions in individual interviews were based on important features of cryptocurrency. These features and the resultant response are given in Table 1.

After a thorough review of the literature, important features of cryptocurrency were sorted out. A list of ten (10) features was figured out to bring under discussion to get a clear picture and justification for the acceptance and rejection of cryptocurrency with respect to Sharīʿah. The nature of the issue demands that non-response cases may also be considered to check whether the cited issues are not clear or have some other grounds that need further explanation.

Table (1) Cryptocurrency and Sharīʿah Compliancy

S.No	Important issue of cryptocurrency	Sharīʿah Scholars' Response (%)		Summary of the Reponses
1	Centralization is necessary for a currency in Sharīʿah	Yes	50	A valid currency under Sharīʿah must be issued by a central authority to ensure public interest and mitigate risks such as fraud
		No	42	General public acceptability is more crucial, provided the currency upholds key Sharīʿah principles
		NR	8	A cryptocurrency could function without a central authority, although they recognized the potential for complications and legal disputes in such a system.
2	A thing with limited acceptability can be a valid money	Yes	38	A currency with limited acceptance can still be considered valid under Sharīʿah if mutually agreed upon by trading parties,
		No	29	Broad acceptance is essential for a currency to be effective.
		NR	33	Debating the general acceptability of a currency was irrelevant, as they believed obedience to a Muslim ruler's decisions is obligatory, regardless of personal opinions.
3	A money must be good "store of value"	Yes	38	Sharīʿah implies money should retain its value to avoid oppression
		No	29	Any medium of exchange inherently serves as a store of value, suggesting that the ability to exchange is sufficient for a currency's validity
		NR	33	Did not express an opinion about the issue of store of value
4	A currency can be used for speculative investment	Yes	50	Focusing on the rules of *bai al-sarf* (currency exchange), using currency as an investment tool aligns with Sharīʿah principles.
		No	33	Claiming that it goes against the core reason for money in Islam
		NR	17	Respondents were not clear about the role of cryptocurrency for speculative investment as there is a difference between using currency for speculative investment and using currency as speculative investment.

5	Cryptocurrency involves *maysir*	Yes	37	Inherent volatility and speculative nature of cryptocurrencies introduce elements of *maysir*, challenging their compliance with Sharīʿah principles.
		No	50	*Maysir* arises from how the currency is used rather than from the currency itself
		NR	13	They disputed the blanket statement that individuals leverage volatility for gain, noting that volatility affects all currencies depending on the exchange rate systems practiced in a country.
6	Cryptocurrency jeopardizes *maqasid al-Sharīʿah*	Yes	17	Value swings are not intrinsically against *maqasid al-Sharīʿah*
		No	47	Only currencies with low volatility are compliant with Sharīʿah
		NR	37	Unsure how *maqasid al-Sharīʿah* could be achieved or not achieved by using a currency.
7	"Vulnerability to hacking attacks" disqualifies cryptocurrency in Sharīʿah	Yes	17	Such vulnerabilities violate the objectives of Sharīʿah,
		No	58	Susceptibility to theft does not necessarily make a currency impermissible in Sharīʿah, drawing comparisons to traditional forms of wealth like banknotes and gold.
		NR	25	Did not express an opinion about the issue of hacking
8	Identity of currency's creator is important in Sharīʿah	Yes	17	Creator's identity is important for fostering trust, accountability, and transparency, which are aligned with the objectives of Sharīʿah
		No	83	The identity of the creator is not crucial from a Sharīʿah perspective, as Sharīʿah law does not mandate specific requirements for currency issuance
		NR	0	-
9	Cryptocurrency is impermissible because of promoting "illegal activities"	Yes	0	-
		No	83	Currency itself is neutral, and its compliance with Sharīʿah depends on how it is used, not on its potential for misuse.
		NR	17	Disagreed with the claim that cryptocurrencies promote illegal activities but did not provide reasons for their disagreement.
10	Totally computerized and vulnerable nature of currency, is permissible in Sharīʿah	Yes	71	A fully computerized currency could be Sharīʿah-compliant if supported and regulated by a central authority, reflecting modern digital financial practices
		No	21	Such currencies could violate Sharīʿah principles of wealth preservation due to risks like hacking and volatility.
		NR	8	Not clear about the vulnerability aspect of cryptocurrencies.

Source: Compiled by the authors

4.1. Decentralized Currency in Sharīʿah

The concept of a decentralized currency like cryptocurrency poses a significant challenge within the Sharīʿah context. As illustrated in Table 1, a slim majority of the interviewed scholars (50%) believed that a currency should necessarily be issued by a central authority, while a slightly lower percentage (42%) held the contrary view.

The proponents of centralization argued that a central authority is an integral condition for a valid currency under Sharīʿah. They suggested that if a currency lacks intrinsic value or is not backed by an asset, it must, at the very least, be endorsed by a central authority to mitigate societal risks and fraud and to fulfill *maqasid al-Sharīʿah*. Thus, centralization was viewed as a fundamental requirement for a currency to maintain *maslaha* (public interest) and meet the objectives of Sharīʿah, especially when the currency lacks inherent value.

Conversely, scholars who oppose the central authority requirement argue that a currency's widespread acceptability among the general populace is a more critical

factor for its validity under Sharīʿah law. This perspective aligns with Paracha (2018), who emphasizes that the central authority's endorsement is not mandatory as long as the currency adheres to key Sharīʿah principles, such as functioning as a store of value and a medium of exchange, earning public trust, and avoiding manipulation or unjust practices.

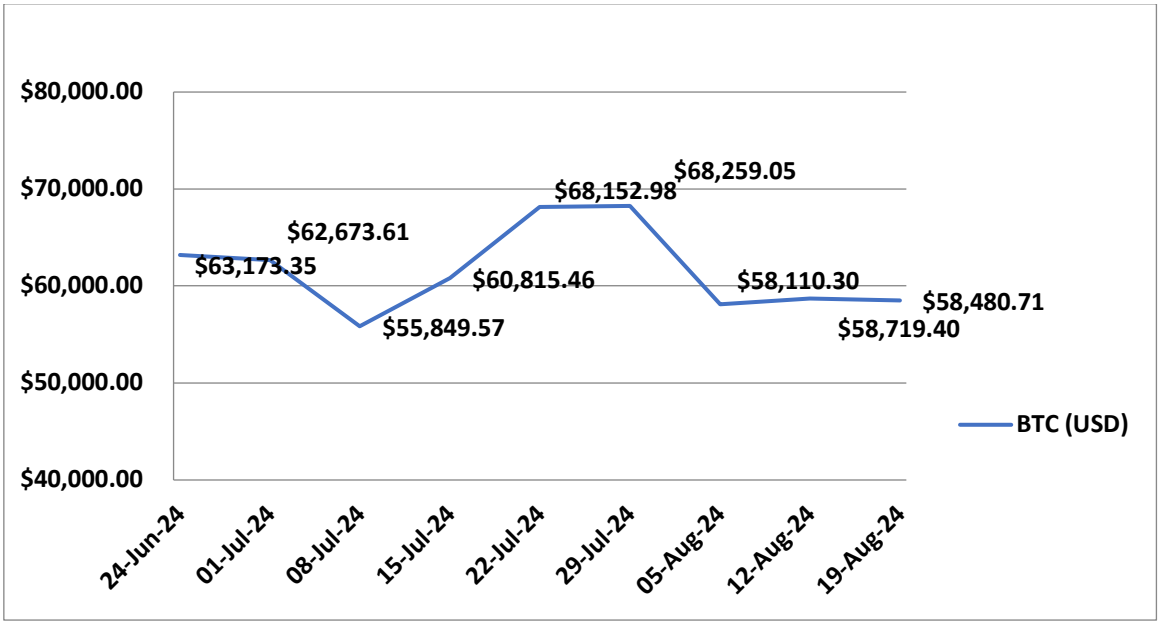
This viewpoint is indicative of Abdullah (2022) discussion on classical Islamic monetary theory, where scholars upheld a coinage system based on the Shari'ah dinar and dirham. These currencies operated independently of government intervention or financial intermediation, except for ensuring the purity of the gold and silver content. The focus of this system was on maintaining currency stability rather than directly stabilizing prices, allowing market forces of supply and demand to determine the value of money. Such an approach inherently supports a laissez-faire economic model, emphasizing minimal state intervention in monetary affairs.

In the contemporary context, with the advent of advanced technology, the feasibility of a decentralized digital currency backed by gold and silver becomes apparent. This modern adaptation would involve the public issuance of money, thereby preventing banks from creating credit through lending. This shift could transform banks, particularly Islamic banks, into genuine wealth management and investment intermediaries rather than mere lenders.

Historically, the issuance of money has been a function of central authority, an arrangement that has largely worked for maintaining public trust and economic stability. However, the current nature of cryptocurrency appears to contravene these established principles. Taking into account the principle of *maslaha* (public interest), cryptocurrency presents notable risks to the security of individuals' wealth. Firstly, despite theoretical assurances of high security through blockchain systems and proof of work algorithms, instances of significant amounts of cryptocurrency being hacked from exchanges worldwide prove otherwise. These thefts are challenging to trace due to the anonymous nature of transactions and the possibility of a single user holding multiple wallets.

Secondly, the extreme volatility of cryptocurrency value jeopardizes the Sharīʿah principle of *maqasid al-Sharīʿah*, particularly the protection of people's wealth. For instance, a person holding 1 BTC (equivalent to $68,000 as of July 29, 2024) might not be able to purchase the same quantity/type of goods after a week if the value of 1 bitcoin decreases to about $58,000, as indicated by the average price fluctuation of bitcoin within a week (Figure 2). The situation may worsen if we consider the bitcoin's price for the period of one year.

Figure (2) - Average price of bitcoin during the period of June 2024-August 2024



Source: Coinmarketcap.com (August 2024)

The unpredictability in bitcoin's value is due to its lack of legal protection. Companies may announce acceptance of cryptocurrency payments, causing a spike in bitcoin's price, only to later rescind their acceptance, causing a subsequent decline. For example, in March 2021, Tesla announced acceptance of cryptocurrency, leading to a 5% increase in bitcoin's value. However, when they stopped accepting cryptocurrency due to energy concerns in May 2021, bitcoin's value decreased by 10%.

Therefore, the characteristics of cryptocurrency, especially its decentralized nature and price volatility, currently pose significant challenges to its adoption in a Sharīʿah-compliant financial system.

4.2. Limited Acceptability of Money

The principle of general acceptability is foundational to the issuance and function of currency, as it suggests that for any medium of exchange to be considered money, it must be widely accepted by the public for purchasing goods and services. This principle was a focal point in the interviews conducted for this study, where opinions on the acceptability of cryptocurrency under Sharīʿah law were notably divided.

Approximately 38% of respondents believed that even a currency with limited acceptability could still be considered valid money within the framework of Sharīʿah. This perspective reflects the current state of cryptocurrencies, which, although not universally accepted, are increasingly recognized as a legitimate medium of exchange by a growing number of merchants globally. Proponents of this view argue that when trading parties mutually agree to use a particular asset as a medium of exchange, this agreement bestows the asset with the status of money, aligning with Sharīʿah principles.

This perspective resonates with the views of the medieval Islamic scholar Ibn Taymiyyah, who asserted that Sharīʿah does not prescribe a specific definition of money, instead allowing its determination to be guided by societal customs and mutual agreements. This approach underscores the flexibility within Islamic jurisprudence to adapt to evolving

economic practices, provided that these practices do not conflict with core Sharīʿah principles.

Moreover, this viewpoint is further supported by Paracha (2018), who argued that a currency could be considered Sharīʿah-compliant if it is accepted within at least one market or community, regardless of its broader acceptability. This argument emphasizes that the validity of money in Sharīʿah is not strictly tied to its universal acceptance but rather to its functionality and recognition within specific contexts.

Contrarily, 29% of the experts disagreed, asserting that for a currency to be valid within an Islamic Financial System, it should enjoy broad acceptance. These scholars contend that limited acceptance undermines the general usability of a currency, which is a critical characteristic for it to function effectively as money. This divergence in views underscores the ongoing debate regarding the acceptability of cryptocurrencies within Islamic finance and the need for continued scholarly dialogue on the subject. As cryptocurrencies continue to gain popularity, the discussion surrounding their acceptance within the Islamic financial system becomes even more pertinent.

4.3. Money Must Serve as "Store of Value"

In terms of a currency's ability to serve as a "store of value," there were mixed perspectives from the scholars. About 38% of the scholars agreed that anything that can serve as a "store of value" can be valid money from a Sharīʿah perspective. An expert indicated that while Sharīʿah does not explicitly define money or its key characteristics, it is logically assumed that money should possess the feature of being a good store of value.

The expert continued to argue from the perspective of Sharīʿah that if a currency rapidly loses its value or is not a good store of value, enforcing its usage would amount to oppression (*ẓulm*). This is because it does not safeguard personal rights and people's ownership. In light of this, the experts emphasized that Sharīʿah aims to protect the interests of the common man and thus, a currency that does not store value contradicts the maxims of Sharīʿah, and its use would not be allowed.

However, this viewpoint was not unanimous. About 29% of the experts held a different opinion. They suggested that any medium of exchange inherently holds a store of value, citing the work of McLeay et al. (2014) to substantiate their argument. This group of scholars contends that the capacity of a currency to act as a medium of exchange, by its nature, implies its ability to store value. Despite this alternate perspective, their argument was challenged as being flawed. The ongoing debate among scholars regarding whether a currency must fulfill the function of a "store of value" to be deemed valid under Sharīʿah law highlights the complexities of applying traditional Islamic financial principles to modern economic realities. This issue becomes particularly pertinent in the context of rapidly evolving financial technologies, such as cryptocurrencies, which challenge conventional notions of money and value.

The necessity for a deeper exploration of how Sharīʿah principles can be interpreted in light of these advancements is clear. As financial technologies continue to evolve, there is an increasing need to revisit and potentially reinterpret traditional jurisprudential frameworks to ensure their

relevance and applicability. This process requires not only a theoretical understanding of Sharīʿah law but also a practical appreciation of how these new financial instruments operate within the broader economic system.

Belouafi (2023) highlights this complexity by noting that cryptocurrencies represent only a small component of a vast and intricate financial network. Analyzing these digital currencies in isolation, without considering their interconnections with other forms of money and financial practices, may result in incomplete or flawed judgments. Thus, the discussion around the "store of value" criterion cannot be divorced from a broader analysis of the financial system in which these currencies exist. This interconnectedness necessitates a comprehensive and holistic approach to Islamic jurisprudence that considers both the traditional principles of Sharīʿah and the realities of modern finance.

4.4. Currency as an Investment Tool

The use of currency as an investment tool was another significant aspect explored in the study, examining whether or not such a practice is Sharīʿah compliant. The guiding principles in this regard are the rules of currency exchange or *bai al-sarf*, as detailed by Kureshi and Hayat (2014). These principles include the immediate possession of currency after exchange, the disregard of the quality of currency in its valuation, the necessity of an equal-for-equal basis transaction, the absence of conditional options for contract withdrawal, and the on-spot delivery of the exchanged currency without delay.

In the present study, half of the participating scholars (50%) indicated that currency could be used as an investment tool if these principles of *bai al-sarf* were strictly observed. However, there were some dissenting opinions. Approximately one-third of the scholars (33%) argued that using a currency as an investment is against the very purpose of money and thus, prohibited in Islam. This perspective is echoed in the work of renowned Islamic scholar al-Ghazali, who stressed the primary functions of money as a medium of exchange and measure of value. Al-Ghazali warned against treating money as a commodity, arguing that using money for purposes other than its inherent function could pose a significant threat to its integrity (Islahi, 2001).

Despite these diverging viewpoints, a common thread emerged from both proponents and opponents. They both concurred that the Sharīʿah rule of treating money as money, and not as a commodity, should be respected. Thus, there seems to be a consensus that adhering to these principles could pave the way for utilizing currency in a Sharīʿah-compliant manner as an investment tool. This insight provides a meaningful direction for further discussions and potential adaptations of cryptocurrency practices within the Islamic financial system.

4.5. Element of *Maysir* (Gambling) in Cryptocurrency

The concept of *maysir* or gambling in the context of cryptocurrency was a salient theme in the individual interviews. Responses indicated divided views on whether cryptocurrencies inherently possessed an element of *maysir*. Half of the scholars (50%) argued that *maysir* is a function of the user's actions and not an inherent characteristic of the currency itself. They contended that any currency, including cryptocurrencies, does not inherently encompass an element of *maysir*. This viewpoint focuses on the usage of the

currency, suggesting that improper use leading to speculative practices is what introduces an element of *maysir*, not the currency itself.

In contrast, 37% of the experts suggested that the volatile nature of cryptocurrency value could introduce an element of *maysir*. According to this perspective, the unpredictable and highly fluctuating value of cryptocurrencies often leads users to treat it more as a speculative investment than a means of payment. This behavior introduces an element of *maysir*, transforming the utilization of cryptocurrency into a high-risk gamble. The scholars underlined that stable-value currencies are usually shielded from such elements. Moreover, these scholars pointed out that if a currency is not a legal tender, gains obtained from its use could be indirectly considered *maysir*. They reasoned that when a currency is not legally recognized, profiting from it could be seen as benefitting from a game of luck or chance, devoid of any legal support.

From these contrasting views, it can be inferred that the incorporation of *maysir* into the use of cryptocurrency is dependent on its volatility and legal status. If the value of cryptocurrency could be controlled and it obtained legal recognition, it might be considered Sharīʿah-compliant, provided it is not used as a speculative investment medium. This conclusion highlights the necessity for a regulated and stable cryptocurrency framework for its acceptance under Sharīʿah law.

4.6. Cryptocurrency and *Maqasid al-Sharīʿah*

The objectives of Islamic law, or *maqasid al-Sharīʿah*, stipulate the security and protection of an individual's wealth. At its current stage, there is a prevailing belief that cryptocurrency challenges these objectives, primarily due to its extreme volatility and the absence of governmental oversight. This lack of regulation potentially exposes individuals to considerable financial losses without any recourse to seek remediation for such instances of fraud.

Of the Sharīʿah scholars interviewed, 17% held the view that Sharīʿah law only supports currencies exhibiting minimal volatility. They contend that any deviation from this principle contravenes Sharīʿah law. An expert argued that any entity that fails to maintain its value cannot be classified as a valid form of currency under Sharīʿah law. Contrastingly, a substantial portion of the respondents (46%) disagreed with the notion that high volatility inherently undermines *maqasid al-Sharīʿah*. In their view, a currency's permissibility is not invalidated if its value diminishes. This perspective is founded on the premise that conventional forms of currency are also subject to fluctuations in value.

However, this view fails to adequately consider the interconnected nature of cryptocurrency's volatile tendencies and the security of an individual's property, an essential principle under *maqasid al-Sharīʿah*. If analyzed in isolation, these components yield different results. Thus, the criticality of maintaining the protection and stability of one's wealth, as enshrined within the objectives of *maqasid al-Sharīʿah*, should remain a central consideration in any discussions regarding the permissibility of cryptocurrency within the Islamic financial system.

4.7. Vulnerability to Hacking Attacks and Validity of Money

A significant aspect of the discussion surrounding cryptocurrency is its vulnerability to hacking attacks. This vulnerability brings into question the validity of such a currency from a Sharīʿah perspective. The majority of the interviewed experts (58%) suggested that a currency susceptible to hacking activities could still be considered a valid form of currency within Sharīʿah law. They argued that susceptibility to theft or unauthorized access does not necessarily render a form of currency impermissible in Sharīʿah. This viewpoint draws parallels to traditional forms of wealth like bank notes and gold, which are also prone to theft. However, the majority of scholars also seemed to acknowledge the common-sense understanding that an insecure payment system ought to be avoided by contracting parties due to the potential risk and uncertainty it introduces. This prudence is not explicitly a part of Sharīʿah law, but rather a matter of logical reasoning and self-interest.

On the other hand, 17% of experts disagreed, asserting that such currencies are not valid. Their explanation centers on the concept of *maqasid al-Sharīʿah*, or the objectives of Islamic law. They argued that a currency highly vulnerable to hacking not only jeopardizes security but also disrupts the harmony of the financial system, thus violating *maqasid al-Sharīʿah*, which include the preservation of wealth and maintenance of social order. This divergence in views underscores the nuanced complexity of integrating a new and disruptive technology like cryptocurrency into a traditional and normative system like Islamic finance. Further dialogue and scholarly interpretation would be needed to form a more definitive conclusion on this matter.

4.8. Identity of Currency's Creator in Sharīʿah

The issue of the identity of a currency's creator, particularly in the context of cryptocurrencies, incited diverse responses among the Sharīʿah scholars. A significant majority (83%) believed that the identity of the creator of a currency was not a crucial requirement from a Sharīʿah perspective. Their argument stemmed from the belief that Sharīʿah law does not stipulate specific mandates for currency issuance, thereby suggesting that the anonymous or pseudonymous nature of cryptocurrency creators does not inherently conflict with Sharīʿah principles.

Contrarily, 17% of the experts considered the identity of the currency's creator to be a significant factor from a Sharīʿah perspective. They underscored the importance of safeguarding the public interest as the central rationale for their perspective. These scholars posited that knowledge of the creator's identity can foster trust, accountability, and transparency in the monetary system, elements that align with *maqasid al-Sharīʿah* or the higher objectives of Sharīʿah. In their view, knowing who is behind a currency can help guard against fraudulent activities and financial misconduct, thus protecting the integrity of the Islamic financial system.

The divergence in scholars' opinions on this issue mirrors the broader debate on the compatibility of cryptocurrencies with Islamic finance. It signifies a need for further scholarly dialogue and jurisprudential exploration to reconcile these differing viewpoints and to develop a comprehensive understanding of how the

anonymity of cryptocurrency creators fits within the Sharīʿah framework.

4.9. A Currency "Promoting Illegal Activities" in the Light of Sharīʿah

A significant proportion of the Sharīʿah experts, approximately 83%, indicated that the potential use of a currency for illicit activities does not inherently disqualify it from being Sharīʿah-compliant. This perspective highlights a nuanced understanding of currency and its use within an Islamic economic context. According to these scholars, the underlying principle is that the nature of the currency itself, and the actions it is used for, are considered separately in terms of their adherence to Sharīʿah law. Thus, the anonymity provided by a particular currency, such as cryptocurrency, which could potentially facilitate illegal transactions, does not in and of itself render the currency non-compliant with Sharīʿah principles.

This understanding is rooted in the broader Islamic principle that a tool or medium is not inherently haram (impermissible) based on its potential misuse. Rather, it is the act of misuse itself that is seen as impermissible. In this case, it is not the cryptocurrency that is problematic but the illegal activities that it may potentially facilitate. However, this finding does not dismiss the ethical concerns related to the potential misuse of cryptocurrency. Instead, it highlights the necessity for robust regulatory frameworks and monitoring systems to prevent and combat the misuse of such innovative financial tools.

The remaining respondents chose not to respond to this issue, indicating the need for further exploration and discourse in this area. The inherent anonymity of cryptocurrency, its potential misuse, and its implications for the Islamic financial system is a complex issue that warrants deeper investigation.

4.10. Totally Computerized and Vulnerable Currency under Sharīʿah

Analysis of the interview data showed that 71% of the scholars interviewed were in agreement that a completely computerized currency could be allowed under Sharīʿah, provided it fulfills certain conditions. This view considers modern realities of transactions and finance, where even conventional currencies often exist in digital forms in bank accounts. The scholars contended that if such a digital currency is introduced and protected by law by a central authority, it can be seen as valid under Sharīʿah. They reasoned this by comparing it to conventional currencies, which although represented by physical notes and coins, also exist as mere digits in bank accounts. However, these conventional forms of money are underwritten and guaranteed by a government, lending them credibility and legitimacy. In this context, Abdullah (2024) provides a broader analysis, noting that the emergence of private cryptocurrencies and the anticipated widespread adoption of retail central bank digital currencies (CBDCs) could significantly disrupt the traditional commercial banking model. The introduction of these digital currencies is expected to eliminate the practice of credit creation—a core function of commercial banks—thereby challenging the existing financial structures. This transition would likely result in a profound transformation of the global financial system, marked by a clear distinction between the public issuance of money, controlled by central authorities, and the private issuance of equity finance and investment, managed by decentralized entities.

In contrast, cryptocurrencies lack this central authority's backing, which leads the scholars to question their real value and legitimacy. These scholars argued that if cryptocurrencies were supported by a central authority, then they would become Sharīʿah compliant, further demonstrating the critical importance of centralization in the acceptability of a currency in Islamic finance. However, 21% of the respondents disagreed with this perspective. They voiced concerns that such a completely computerized currency could violate the Sharīʿah principle of preservation of wealth. They argue that the inherent vulnerability of cryptocurrencies, such as their susceptibility to hacking and market volatility, pose a significant risk to the holders' wealth, thereby challenging their acceptability under Sharīʿah.

A notable insight from the interviews was the assertion by some scholars that the issue of a fully computerized and vulnerable currency is more of an administrative or regulatory problem than a Sharīʿah issue. This perspective underscores the need for robust and secure systems for managing and regulating digital currencies to ensure their compliance with Islamic financial principles.

5. Non-Response Cases

Non-response cases present unique insights as they represent areas where the scholars chose not to express an opinion due to uncertainty or because they felt that the issues required further examination. These cases have been noted separately to highlight areas of ambiguity or disagreement among the respondents (Table 1, Column 1 & 2).

A small number of respondents (8%) refrained from commenting on the requirement for a central authority to issue a cryptocurrency. These respondents seemed to believe that the objective of a currency could still be achieved without a central authority. However, they acknowledged the potential for complications and legal disputes in a system operating without a central authority.

Regarding the general acceptability of a currency, 16% of the respondents did not express an opinion. They deemed the discussion moot as they believed obedience to the orders of a Muslim ruler is obligatory, regardless of personal opinions. The argument over the general acceptability of a currency did not resonate with these respondents.

The highest level of non-response (33%) was related to the issue of a currency serving as a 'store of value.' This pattern of non-reponse might reflect a broader hesitation among scholars to fully endorse cryptocurrencies, given their relatively recent emergence and the significant challenges they pose, such as extreme volatility, regulatory uncertainty, and the potential for misuse. The absence of a strong consensus on the "store of value" function may indicate that scholars are still grappling with how to reconcile these modern financial instruments with traditional Sharīʿah principles.

Approximately 17% of the respondents abstained from commenting on the role of cryptocurrency in speculative investment. These respondents appeared to differentiate between using a currency for speculative investment and using a currency as a speculative investment, which may have contributed to their reluctance to take a position.

Around 13% of the respondents did not respond to the issue of the element of

gambling (*maysir*) in the cryptocurrency system. They disputed the blanket statement that individuals leverage volatility for gain, noting that volatility affects all currencies depending on the exchange rate systems practiced in a country.

A significant proportion of respondents (37%) were unsure how *maqasid al-Sharīʿah* could be achieved or not achieved by using a currency. Similarly, about 25% of respondents did not express an opinion about the issue of hacking, as they were unclear about the methods used to hack cryptocurrencies.

Approximately 17% of respondents disagreed with the assertion that cryptocurrencies can promote illegal activities. They did not voice their reasons for this disagreement. Additionally, 8% were not clear about the vulnerability aspect of cryptocurrencies.

Remarkably, there were no non-responses regarding the identity of the currency's issuing authority, indicating the scholars' unanimous agreement on the importance of this aspect for a currency to be Sharīʿah compliant.

6. Conclusion and Recommendations

Our study has established a nuanced understanding of the acceptability of cryptocurrency within the Islamic financial system. The analysis of Sharīʿah scholars' opinions highlighted that all aspects of cryptocurrency should be examined collectively rather than in isolation to determine its Sharīʿah compliance. Given the multifaceted nature of cryptocurrencies, an absolute statement on their permissibility in Islam should only be made after careful consideration of the system's intricacies.

The necessity for centralization in a Sharīʿah-compliant currency was a key finding of this research. The scholars emphasized that a currency must be backed by a central authority, especially if it lacks intrinsic value or asset backing, to achieve *maqasid al-Sharīʿah*. This backing can mitigate societal risks and fraud. Further, the currency must serve as a store of value to align with the objectives of Sharīʿah. Our results indicated that the volatility of cryptocurrency value doesn't violate *maqasid al-Sharīʿah* or embody the element of *maysir* (gambling).

Limited acceptability and vulnerability to hacking attacks were not seen as grounds for declaring cryptocurrency impermissible in Sharīʿah. The potential for a fully computerized currency was also seen as permissible, provided it is supported by a central authority.

The patterns of non-response observed in this study reveal areas of both consensus and contention among Islamic scholars concerning the application of Sharīʿah to modern financial instruments like cryptocurrencies. These non-responses not only highlight the complexities and uncertainties surrounding the integration of new financial technologies into Islamic finance but also point to the need for further scholarly exploration and debate to address these emerging challenges.

Based on these findings, we recommend the following:

1. **Holistic Examination**: For a thorough understanding of cryptocurrency's compatibility with Sharīʿah, an integrated approach should be taken that simultaneously considers all aspects of the cryptocurrency.

2. **Regulatory Measures**: To address the identified requirement for centralization, regulatory measures could be explored to incorporate a form of central authority into the operation of cryptocurrencies.

3. **Technology-Driven Solutions**: To address issues of hacking vulnerability, robust technology-driven solutions should be employed for enhancing the security of cryptocurrency transactions.

4. **Further Research**: Further research should be undertaken to explore how cryptocurrencies can be adapted or reformed to better comply with Sharīʿah principles, especially around issues of value volatility, centralization, and societal risk.

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المستخلص. تستكشف هذه الدراسة مدى إمكانية اعتماد العُمُلات الرقمية المشفَّرة في النظام المالي الإسلامي، وهو موضوع نقاش كبير بين العلماء، والممارسين على السواء. ونظراً للطبيعة اللامركزية للعملات المشفرة، فإن قبولها في الأنظمة المالية التقليدية والإسلامية يطرح تحديات فريدة. وللتأكد من شرعية العُملات الرقمية المشفَّرة وإمكانية اعتمادها في ظل نظام مالي قائم على أسس الشريعة الإسلامية، استخدمت الدراسة أساليب بحث نوعية، عبر مقابلات متعمقة مع أربعة وعشرين عالماً من علماء الشريعة. يتمتع هؤلاء العلماء، الذين تم اختيارهم من خلال تقنيات أخذ العينات الهادفة والتراكمية، بمعرفة متخصصة بكل من العُملات الرقمية المشفَّرة والنظام المالي الإسلامي. كشفت نتائج الدراسة أن قبول العُمُلات الرقمية المشفرة في الأنظمة المالية المتوافقة مع الشريعة الإسلامية يتوقف على مركزيتها؛ أي أن تكون تابعة لسلطة مركزية عامة، ووظيفتها كمخزن للقيمة، بما يتماشى مع الأهداف العامة للشريعة (مقاصد الشريعة). إن افتقار العملات المشفرة إلى القيمة الذاتية يستلزم دعمها من قبل سلطة مركزية أو أحد الأصول للتخفيف من المخاطر والاحتيال المحتمل. يخلص البحث إلى تقديم توصيات قيمة حول الاعتبارات المطلوبة لتبني العُمُلات الرقمية المشفرة في منظومة التمويل الإسلامي، مما يساهم في المناقشة الجارية حول مدى شرعية هذا النوع من العُمُلات.

الكلمات الدَّالة: العملات الرقمية المشفرة، الشريعة الإسلامية، المركزية، مخزن للقيمة، مقاصد الشريعة

تصنيف **JEL:** E40, E42, E58, G23, G28
تصنيف **KAUJIE:** B4, B5, Q11, Q23, Q5