

p-ISSN: 2071-8683, e-ISSN: 2707-0077 Volume:25, Issue:2, 2020; pp. 473-491

Phenomenological Study; Assessing the Differences in Crypto-Currency and Other Forms of Currencies, Legality in Islamic Jurisprudence

Munib Siddiqui

MBA Risk Management – Director Operations IHIC – Senior Researcher JDUI (Corresponding Author)

Dr. Sh. Usman Yousaf

MBA Risk Management – Director Operations IHIC – Senior Researcher JDUI Assistant Professor HCBF, PU, Lahore - PhD Management.

KEYWORDS:

BITCOIN; BLOCKCHAIN; CRYPTO-CURRENCY; ISLAMIC JURISPRUDENCE; SHARIA.



Date of Publication: 31-12-2020

ABSTRACT

Purpose, Main aim of this research is to spot a light on the working of crypto-currencies and the system of block chain, with the brief literature review find the evolution in currencies. A review of cryptography and currency mining, an overview of the status of e-finance and discuss related issues and challenges. This paper Introduces advances and innovations in e-finance and challenges facing the financial services and IT industries. In addition, this research elucidates the Sharia status of crypto-currencies and their trade in the light of Islamic Jurisprudence. Design/methodology/approach, the paper employs the phenomenological technique of reviewing related literature, cross tabulation technique is used to identify the sharia status of crypto-currency, for that number of interviews conducted and recorded. Time spend on observing the network to ascertain how Bitcoin transactions work. Findings, using cross tabulation and phenomenological analysis, multiple factors identified to determine the Sharia status of crypto-currency. It tries to identify the actual standing of crypto-currency in Sharia jurisprudence. Originality/value, the development of sharia status, in theory could be helpful to widen the

scope of Islamic Finance. Currently researchers and practitioners are still sceptical in the status of crypto-currency. Either is it legitimate to trade with these crypto currencies under the Islamic law and jurisprudence. {206 words}

Introduction:

For Islamic believers, it is very proud to belong to the same faith. Such a large part contributed to the social solidarity and cultural development. In the world they see their religion first as a righteous way and in the Hereafter forever. They also see it as a generator, an original and rich civilization. In the past, currency was made of different metals and still small coins are made of metal. After the invention of the computer, the paper currency is gradually changing to digital currency. Like religion, currency controls human beings. But unlike religion, currency also controls governments and policies of inter-governmental issues. When Marco Polo first arrived in China in May 1275, traveling 5600 miles in a three-and-a-half-year period, he was surprised to see four things. These were: burning stones (coal), non-combustible cloth (asbestos), paper currency and the royal postage system. Marco Polo writes: You could say that (Kublai) Khan had a knack for chemistry. Every year, without any expense, Khan would make such a huge amount of money that it was equal to all the world's treasures. But even before China, paper currency was used in Japan. In Japan, this paper currency was issued not by a bank or a king but by a pagoda. It is said that the paper currency is the biggest fraud in the world today. And now, having gone through the evolutionary stages, it has gone digital and has no idea what shape to take next. Islam has indeed provided mankind with a complete system of life, which in addition to worship, also offers solutions to the problems of economics and society. Beginning with the appreciation of gold in the research below, we will review its evolutionary stages and try to see in what context Islam views this progress. Prior to the invention of the rupee, transactions and trade were under the "barter system", for example a cow could be purchased for some sacks of wheat. Likewise, a service or something was paid for the service. But in the case of wheat and cows, long-term savings are not possible. So there was a need for another

currency, which would make saving even easier. So people of that era decided to introduce a mechanism for evaluation of things and make it the measure of value, which was called currency.

Literature Review:

Definition of Zarr (Currency in the light of Islam):

What is used as an alias device exchange and is a measure of value and the value can be stored by this, is called cash. According to the economic term, these three characteristics are called "Naqd" in Arabic and "Zarr" in Urdu¹

Difference between "Zarr" and Currency:

Both "Zarr" and currency are exchanges, but "Zarr" are not legally exchanged, while currency is declared as a device of exchange, as Mufti Taqi Usmani writes:

"Zarr" is something that is exchanged through; measuring value and preserving value are compulsory elements but it not necessarily needed to enforce by law it is like forged devices such as check or holding bonds. If a person is unwilling to take his right in the form of a bond, he cannot be compelled to sue. And the "currency" is the currency that is legally declared as a device of exchange in a particular country such as rupee, if a person pays in rupees, he will be legally forced to take it².

Evolution of currency:

Since currency is not in a state, it continues to change as time progresses. What are the stages of crossing the zircon to its present state? We review it below.

 In ancient times, during the early stages of human civilization, people's needs were very limited. Everyone was accustomed to living on what they produce. Inward life was preferred rather than collective life. The commodity trade was not high due to the lack of transportation. Since the concept of gold did not exist. Therefore, in order to meet the economic downturn, there was some kind of direct commodity exchange, namely, commodity turnover. For example, the farmer could buy clothes, shoes, and other household items in exchange for his excess grain. This process is called direct exchange or barter system³

There are some problems with the barter system. So gradually this method became obsolete, but a case of it can be seen in the present time. However, such exchanges still appear to be some place, as some hawkers in their street coaches may have noticed that they used old clothes, old shoes and newspaper junkies to replace them with dishes⁴.

There were so many difficulties in Barter system like:

- A. Absence of common measuring device.
- B. Two-way incompatibility of needs
- C. Non-divisible objects
- 2. This was followed by another system called the monetary system. In this system, people made various commodities as a means of exchange. And generally used as a means of exchange for commodities. For example, cereals and wheat were sometimes used as a source of exchange. But there were many transportation difficulties in using these items for exchange. So as the population increased and the needs of the people started to increase and the exchanges started to increase. The people thought that there were many difficulties in the way we adopted the exchange. So there has to be some way in which the transport is minimized and the people have more confidence in it⁵.
- 3. Finally, in the third phase, people made gold and silver as a source of exchange. Because they are both precious metals. And whether it's in the form of ornament. Or in the form of utensils they also had their own personal value. And the transportation and storage was easy too. Even these two precious metals served as a measure of commodity prices. And in all the countries and cities, people started to rely on these metals. This system is called gold mineral⁶.

When people made gold and silver as a source of exchange, many exchanges and revolutions took place over time, which is summarized below.

Initially, people used gold and silver as currency, which was different in terms of weight and cleanliness, some in the form of gold pieces. Someone was in the form of loose utensils and ornaments. But at the time of the exchange only weight was calculated⁷.

After that, the practice of milling coins began. In some cities, gold coins and silver coins were found in some cities. Those are equal in status; equal in terms of weight and purity. And on which were stamped on both sides. It was a sign that these coins were valid and exchangeable. And the apparent value of the coin was written on it. The value of gold in the form of coins was equal to the weight of the coin. This system is called the standard rule⁸

Coinage:

After a long journey of gold coin people used to accept the stamped metallic coins. A coin is actually an iron tool from which to make rupees. But in general die cut specific piece of metal, which is approved by the Government as currency, is also called coin. Because the impressions of the coin come on it⁹. The first coins in the world were invented by the Chinese in the 7th century BCE¹⁰. In the early days of the world, commodity transactions were usually through commodities - when the trade of the world became the source of declining gold prices. But in general, weight and reading difficulties were realized, and governments issued coins for the benefit of the people¹¹. The nations of the covenant had their own coins in ignorance. But more walking was the following coins:

- 1. The coins that were the most common were the dinars. Dinar coins were practiced in Rome, Syria, Egypt, etc.
- 2. Durham was the second coin that was popular. Durham was practiced mostly in Iraq, Persia and so on 12.

3. Prior to Islam, Iranian and Roman coins were used in Arabia. The image of some, the praise of some of them was declared as ALLAH and some of them Muhammad SAW. The research is that only the dinars shielded in the Covenant Caliphate Rashida were not shielded. The dinars were adapted in the time of Benomiya during the time of Abdul Malik bin Marwan¹³.

Paper Note:

Note is actually a French language term. The French dictionary contains the Qamos-ul-Ruswabar-e-Arrow, quoted from it on page 68.

Bank paper is a mineral paper and its value is able to be paid at the time of reporting to its holder, it is dealt with exactly like mineral coin. But it is important that it must be guaranteed - so that people can trust in dealing with it¹⁴.

Whether coins are made of gold or silver, although they are easier to transport than goods and equipment, on the other hand they are easy to steal. Therefore, it was difficult for the wealthy to store large quantities of these coins and keep them in the house. As a result, they began to deposit large quantities of these coins as gold and silver coins. And when they kept the coins and gold coins, they would issue a trustworthy paper as a copy of the trust to them. Gradually, as people became more confident in the goldsmiths, the receipts were received by the young goldsmiths as a document, while the trust was used as a mediator. Therefore, a shopper would give one of these receipts at the time of purchase instead of cash. And the shopkeeper would accept the receipt on the basis of their reliance on this.

This is the origin of the paper note - but in the beginning it did not have a particular form and did not have any legal status that would force people to accept it. Rather, its acceptance and rejection depended on the fact that the acceptor relied on his issuing jeweler¹⁵. When these receipts increased

in the markets in the early part of the year, bank notes were developed and became a formality, called banknotes. It is said that Stockholm Bank of Sweden first issued it as a paper note. At that time, the issuing bank used to have 100 percent of the gold in exchange for these paper notes. And the bank was obliged to issue only the amount of notes that he had in gold, and the holder of this paper note was empowered to go to the bank whenever he wanted and get a gold bar. That is why these systems are called the quality of gold bars¹⁶. Some historians have suggested that the invention of currency paper was first made and used by China. They saw that there was a bark coin of a tree. This is used in the transaction like gold and silver. Then in the thirteenth and fourteenth centuries the governments of Persia and Japan also imitated China. Europe realized its use and benefits after centuries¹⁷.

Legal Status of paper note:

فهذه هى بداية بنك نوت----ثم لماكثر التعامل بها منعت الحكومات ان يصدرها الاشخاص و اقتصر اصدارها على البنوت ثم لما اذداد شيوعها جعلتها الحكومات ثمنا قانونيا وجبرت كل دائن ان يقبلها فى اداء دينه كما ليجبر بقبول النقور. وحينئذ منعت البنوك ان تصدرها الالبنك الرئيسى الحكومي. وحينئذ صارت هذه الاوراق فى حكم النقور سواء بسواء 18

Because of the general reliance on these business notes of the traders, the government was convinced that we would not be demanded to replace all the issued notes at the same time. To overcome the difficulties, a large quantity of paper notes was issued which was higher than the current quantity of gold¹⁹. Such notes are called deposits. Gradually, the number of credentials became much higher than the gold available in the country, and the government was in danger that they could be demanded to convert the notes into gold by the current amount of gold. At that time, many countries made very strong bets on converting notes to gold. Then the British government forbade the converting of the notes into gold, and the people were compelled to pay attention only to those notes²⁰. Retained the law of converting each other's notes to gold.

After World War II, all currencies were exchanged with the US dollar and the US dollar was backed by gold in international trade. However, the United States was willing to pay the dollar for gold. Gold became very scarce in the United States. So on August 8, the United States abolished the law to convert dollars to gold. Thus, the final form of holding the paper notes with gold was also abolished after this law. Now the notes neither represent gold nor silver, but are also representing a hypothetical buying power. That is implemented now in all countries. The movement is on to set the foundation of the financial system of gold as before²¹.

Sharia Status of Paper Currency (Note):

Whether the note is a reference (Hawala) or mediation (Saman), before discussing it, it is proper and necessary to mention the definition of reference and mediation so that the matter is made clear.

• Reference (Hawala)

The literal meaning of reference is to meditate, and the Shari'ah means transfer of duty from one party to other.

And in the "Maghrib" the syntax of the reference indicates the ending and moving. And it is in this context that the word is conveyed which means to move something from one place to another.

• Mediation (Saman)

Maulana Ashraf Ali Al-Farooqui al-Thanhvi praises Saman in his book as:

الثمن بفتحتين هو مايلزم بالبيع ، وان لم يقوم به كذافي جامع الرموز والحاصل أن مايقدرة العاقد ان يكونه عوضا للمبيع في عقد البيع يسمى ثمنا وفي البرجندى في فصل الصرف قال الفراء: الثمن عند العرب مايكون دينا في الذمة والدراهم والد نانير لاتستحق بالعقد الادينا في الذمة والثمن اذا أطلق يراد به الدراهم والدنانير 24

Saman is what is required by law. Even though its price has not been set. Comprehensively Mediation (Saman) is that which is appointed as the consideration against the commodity by traders.

The notes were loan certificates, documents and references in their early years. That is why the scholars of the time, the great scholars, gave the verdict that the notes are credentials and references. Some of these fatwas are mentioned in the coming line.

في تعريف أوراق البنك. حيث قال: ورقة البنك هي ورق عملة قابلة لدفع قيمتها عينا لدى الاطلاع لحاملها وهي يتعامل بها كمايتعامل بالعملة المعدنية نفسها غير أنه ينبغى أن تكون مضمونة ليثق الناس بالتعامل بها. فقوله قابلة لدفع قيمتها عينا لدى الاطلاع لحاملها لم ليجعل شكافي انها سندات ديون، ولا عبرة بما توهمه عبارته من العامل بها كما يتامل بالعمل المعدنية لان معنى تلك العبارة أن الناس يأخذونها بدل العملة، ولكن مع ملاحظة أن قيمتها تدفع لحاملها، و انما مضمونة بدفع قيمتها. وهذا صربح في ان تلك الاوراق سندات ديون. وعبارته اخذتها من بلوغ الاماني شرح فتح الرباني 25

For this reason many scholars of India in the last century have issued the decree that the note is a reference and a certificate of credit. The note is valid and the certificate is the amount of money that is written in it, it is not self-sufficient, and the quantity of the paper cannot be valued²⁶.

It is said in Imdadul Fatawa by Hazrat Molana Ashraf Ali Thanvi:

"The note is in fact a certificate of money and it has the power at all times to earn it whenever it wants. So the note itself is not a hoax but the money that it has is a certificate" ²⁷

Same is the verdict given by Mufti Kifayatullah:

"The note is a certificate which is given by the Government in accordance with the amount of money that is entered into the treasury. It is customary because of its ordinary money, meaning that it does not impose the name of a particular person on it." ²⁸.

Hazrat Maulana Mufti Jamil Ahmad Sahib, Thanvi, said in reply to a jurist. These are invoice notes or legal notes or dollars that are not all goods, but receipts of those goods²⁹.

The note is not a gold or gold coin but it is a receipt which is available to the Government or the bank. The power is given to this note.

```
حتى ان بعض الحكومات الكتفت وضع المبلغ في الورقة ولاتذكر التفاء بالقانون الذى صدر تحرير هذه الاوراق فانه كافل ، لان الورقة متى قدمت لمن اصدرها وجب عليه ان يدفع لحاملها حالا<sup>30</sup>
```

Some governments are reluctant to just write money on the note and the law of the note is deemed sufficient, because it means that the person who has this paper has a certificate of debt and the government has to pay enough money to the holder.

The above statement makes it clear as daylight that the note was in its early stages as a reference and document.

Paper Note has now become alias and currency:

Some scholars of the present era, in view of the above arguments, are still convinced that the note is a reference and a certificate. But it is a fact that the alterations of the alias change the rules of the Shariah³¹. As in the past, gold could be bought from silver and gold, at any time, except that in the present day, everything could be bought from every note. That is why scholars say that due to the alteration of the alias, the note has also entered into the alias from the reference and certificate. It is now considered as a legal currency³².

In my view, the correct point on which I am answerable to ALLAH is that now the order of these paper notes on the obligations of Zakat and its

payment is like exactly gold and silver. This is because the transaction of these notes is going on in the same way as the silver and gold transactions are. And the owner of these notes has the right to spend it at any time he wants. Because if a note of one hundred rupees is killed, then the owner will pay a hundred rupees. And when the note is sold, it is not intended to get the price of the paper, because obviously the paper is not worth say more than two bucks. Rather, the purpose is to sell and charge the souvenir. And note of hundred If a person takes out a loan, then pay the hundred note, both cases are considered equal. And debtor does not have any excuse for taking one from creditor, though if creditor is paid non-consensually, he does not take it. Maulana Fateh Muhammad Sahib Lakhnavi's opinion is that the note has become alias³³.

Justice Maulana Mufti Taqi Usmani also has a strong view that the note has become a common alias in the present era.

وبالجملة صارت هذه الاوراق اليوم كالنقور فالذي أرى أن بثمنيتها أصبح قويا، منذأن جعلتها الحكومات أثمانا قانونية، وجبرت الناس بقبولها عند اقتضاء ديونهم، ومنعت البنوك الشخصية من اصدارهاء وجبرت بها التعامل العام فيما بين الناس دون فرق بينها وبين العملة المسكوكة³⁴

Sharia Status of Alias:

Islam has come to the living world, and it will provide the guidance till the Day of Judgment. Islamic law also considered alias, it is considered in many problems of jurisprudence, and alias and habits have even been given the status of law.

القاعده السادسة العارة محكمة. واصلها قوله عليه الصلوة والسلام ماراه المسلمون حسنا فهو عندالله حسن. قال العلائي لم اجده مرفوعافي شئ. واعلم ان اعتبار العارة والعرف ترجع اليه في الفقه في مسائل كثيرة. حتى جعلوا ذلك اصلا. فقانوا في الاصول في باب ماتترك به الحقيقة، تترك الحقيقة بدلالة الاستعمال والعارة 35

Somehow we can conclude it as if the reasoning of the scripts of Quran is coming from the alias, then the alias will not be credited, but if the script is becoming mandatory because of the alias, then it will be trusted.

It is also important to know what are the principles of mediating something, and recognizing it in modern jurisprudence.

Jurisprudential statements indicate that some things are created just to give the work of meditation (Saman). At a large these are two; gold and silver. The second form of credibility is correction, i.e. mutual coincidence. The term refers to the consensus that something is customary according to the custom³⁶.

Now the question is how to determine the meaning of a term and the consensus that it has to be made. In our time, it can be that people behave as themselves. The ancient books are mentioned in jurisprudence³⁷. But the rules and regulations that govern this system are set in motion at this time.

Methodology:

When it is clear that alias has big impact in the sharia status of any currency, this research will explore the features present in the forms of currencies by cross tabulation, for this research interviews have been conducted and answers were recorded in a table. While the features of the currency will define the sharia status of a particular currency. Although people are still having queries but this paper will bring a comprehensive knowledge of Islamic jurisprudential matters regarding currencies.

Digital Forms of Currency:

So by the cross questioning and structured interview researcher came to know that there three major forms of digital currencies in the current economy.

1. **Digital form of currency:** this is the broader term means every currency which has some real asset on the back end. In modern world we can take the example of debit and credit card, every bank card has the account on the back end with some balance. So in a nutshell we can say that when any currency represents its value in a digital form on the computer system it would become the digital currency.

- 2. **Virtual Currency:** This is a narrow form of digital currency. It is basically a toy or any currency which has no value in real life, means this currency is just for games and dummy applications like coins in the car race game.
- 3. **Crypto-currency:** This is the third and the most important form of digital currency. In this research we are mostly concerned about this form of currency. We will discuss this in detail.

Crypto-Currency:

A currency which came into existence with the help of cryptography, crypto-currency is somehow secured with this cryptography. So that it is quite difficult to counterfeit this currency because it is secured with this feature. Most the crypto-currencies are decentralized and distributed on the blockchain³⁸. Because of its decentralized nature no one can alter or manipulate this form of currency once it was created neither an individual nor a government. In the inception the only cryto-currency was "Bitcoin" which the most popular crypto-currency till date. Following the features and concept of Bitcoin many other crypto-currencies came into existence, some of them were the clone application of Bitcoin while some others are little bit split off³⁹.

Some scholars and researchers have the view that crypto-currency is the most secure form of currency; it allows doing online payments with complete confidentiality and security. In blockchain; a distributed ledger create a block for every transaction and once transaction executed the block is locked, no one can alter it or even read it⁴⁰. Further this is the fact that encrypted algorithms and cryptographic shapes of every transaction are unique and has its unique id. It issues a unique public or private key for the traders, and it generates hashing technique⁴¹.

The first crypto-currency was launched in 2009, at that time approximately 17.53 million bitcoins were in circulation with around \$63 billion value⁴². When market grown up with the further development many crypto-currencies launched in the market like "Litecoin (LTC)", "Ethereum (ETH)", "Zcash (ZEC)" and "Ripple (XRP)" etc. currently total market share of crypto-currencies are \$120 billion approximately⁴³.

Results and analysis:

Sharia Status of Crypto-Currency:

With all the literature review we came to know that sharia law requires some features which must be present in the alias currency, otherwise Islam does not recognise any currency⁴⁴. We can enlist those features as:

- 1. Currency must be the alias of the time and become the medium of exchange
- 2. People consider it as the value measuring tool
- 3. Currency must be backed by some asset or guarantee
- 4. It must be secure and less volatile in nature
- 5. Every currency must have its own intrinsic value.

So in the light of these features we conduct the interviews of some professionals of the forex field. Their responses are recorded to conclude that either crypto-currency is the currency in the view of Islam or not.

Cross Tabulation:

Responses from different interviewees are recorded in a cross tabulation. Extreme left column indicates the features of different forms of currencies, and four (4) responses are recorded accordingly. If a feature is presented in the respective form () symbol indicates it, and () symbol means that the feature is not present in this form of currency.

| Forms of Currencies | R1 | R2 | R3 | R4 | |
|---------------------------------|----|----|----|----|--|
| Gold | | | | | |
| Safe / Secure | ✓ | ✓ | ✓ | ✓ | |
| Volatility | × | ✓ | × | × | |
| Medium of exchange | × | × | × | × | |
| Alias | ✓ | ✓ | ✓ | ✓ | |
| Measure of Value | ✓ | ✓ | × | ✓ | |
| Intrinsic Value | ✓ | ✓ | ✓ | ✓ | |
| Backed by security or guarantee | × | × | × | × | |

| Silver | | | | |
|---------------------------------|---|---|---|---|
| Safe / Secure | ✓ | ✓ | ✓ | ✓ |
| Volatility | * | ✓ | × | × |
| Medium of exchange | × | × | × | × |
| Alias | ✓ | ✓ | ✓ | ✓ |
| Measure of Value | ✓ | ✓ | × | × |
| Intrinsic Value | ✓ | ✓ | ✓ | ✓ |
| Backed by security or guarantee | ✓ | ✓ | ✓ | ✓ |
| Paper Currency | | - | - | |
| Safe / Secure | ✓ | × | × | ✓ |
| Volatility | × | × | × | × |
| Medium of exchange | ✓ | ✓ | ✓ | ✓ |
| Alias | ✓ | ✓ | ✓ | ✓ |
| Measure of Value | ✓ | ✓ | ✓ | ✓ |
| Intrinsic Value | ✓ | ✓ | ✓ | ✓ |
| Backed by security or guarantee | ✓ | ✓ | ✓ | ✓ |
| Bank Cards / Plastic Currency | | | | |
| Safe / Secure | ✓ | ✓ | × | × |
| Volatility | × | × | × | × |
| Medium of exchange | × | × | × | × |
| Alias | ✓ | ✓ | ✓ | ✓ |
| Measure of Value | × | × | × | × |
| Intrinsic Value | ✓ | ✓ | ✓ | ✓ |
| Backed by security or guarantee | ✓ | ✓ | ✓ | ✓ |
| Crypto-Currency | | | | |
| Safe / Secure | × | × | × | × |
| Volatility | ✓ | ✓ | ✓ | ✓ |
| Medium of exchange | × | × | × | ✓ |
| Alias | ✓ | × | × | ✓ |
| Measure of Value | × | × | × | * |
| Intrinsic Value | × | × | × | × |
| Backed by security or guarantee | × | × | × | × |

Conclusion:

On a conclusive note we found that the features of currencies are not present in the crypto-currency. So that we cannot declare it as the currency until or unless any government takes the guarantee of this currency. By the literature we came to know the basics of Islamic jurisprudential point of view. And by the responses of interviewees we came to know that crypto-currency does not hold those features and it is highly volatile in nature. So still it is neither a commodity nor a currency in the light of Islamic jurisprudence.

Bibliography

- ★ Abideen, Muhammad Ameen Ibn. Al Radd-ul-Muhtar. Egypt, 1866.
- **★** Ahmad, Prof. Manzoor. Fundamentals of Economics. Lahore: Ilmi Publishers, 2009.
- ★ Ali, Alauddin Muhammad Bin. Al Durr-ul-Mukhtar. Quetta: Maktaba Rasheedia, 1986
- * Antonopoulos, A. M. Mastering Bitcoin: unlocking digital cryptocurrencies. O'Reilly Media, Inc, 2014.
- ★ Crosby, M., Pattanayak, P., Verma, S., & Kalyanaraman, V. "Blockchain technology: Beyond bitcoin." Applied Innovation, 2016: 65-71.
- **★** Dogar, Prof. M. Akbar. Introduction to Economics. Lahore: Mukhtar Brother publishing, 2002.
- **★** Farooqui, Muhammad Ali. Kashaf Istilahat al Funoon. Egypt: Muassa Al Misria, 1951.
- **★** Gangohi, Mufti M. H. Fatawa Mahmoodia. Karachi: H. M. Saeed, 1985.
- ★ Ghaffari, Prof. Noor Muhammad. The Economic Life of Prophet Muhammad SAW. Lahore: Dial Singh Liabrary, 1988.
- ★ Hakeem, Hafiz Abdul. Fatawa Hakeemia. Lahore: Abdul Hakeem Research Institute, 1997.
- **★** Jameel, Mufti. Jameel ul Fatawa. Lahore, 1986.
- ★ Kifayatullah, Mufti. Kifayatul Mufti. Karachi: Sikandar Ali Publisher, 1868.
- ★ Lakhnavi, Molana Fateh M. Ittar-e-Hadaya. Lahore, 2017.
- ★ Mahomedy, Abdulkader Cassim. "Islamic economics: still in search of an identity." International Journal of Social Economics, 2013: 556 578.

- **★** Mufti Zainul Abideen, Intizamullah Shahabi. Tareek-e-Millat. Lahore: Idara Islamiat, 1999.
- **★** Nakamoto, S. Bitcoin: A peer to peer electronic cash sytem. 2008.
- ★ Nujaim, Abne. Al Ishbah Wa Al Nazair. Karachi: Idara Al Quran, 1956.
- **★** Qarzavi, Yusuf Al. Fiqh-ul-Zakat. Karachi: Al Badr Publications, 1983.
- **★** Qasmi, Mujahidul Islam. Jadeed Fiqhi Mabahis. Karachi: Idara Al Qur'an, 1989.
- * Rasheed, Mufti. Ahsanul Fatawa. Karachi: Kutub Khana Mazhari, 1983.
- **★** Fatawa Rasheedia. Karachi: H. M. Saeed, 1985.
- **★** Rehmani, Molana Khalid Saifullah. Jadeed Fiqhi Masail. Lahore, 2018.
- **★** Saeed, Molana. Nature of Paper note and its rulings. Lahore: Imran Academy, 1949.
- **★** Saeedi, Rasool. Guide To Sahih Muslim. Karachi: Rumi Publications, 2000.
- ★ Shafi, Mufti M. Alaat-e-Jadeeda k Sharai Ahkaam. Karachi: Idaratul Ma'arif, 1955.
- **★** Shafi, Mufti Muhammad. Fatawa Darul uloom Deoband. Karachi, n.d.
- ★ Sirer, I. Eyal & E.G. "Majority is not enough: Bitcoin mining is vulnerable." Communications of the ACM, 2018: 95-102.
- **★** Thanvi, Molana Ashraf Ali. Imdadul Fatawa. Karachi, 1860.
- **★** Usmani, Mufti M. Taqi. Islam and Modern Economics. Karachi: Idara Al Marif, 1996.
- ★ Usmani, Mufti M. Taqi. Rulings on Paper currency . Karachi: Memon Islamic Publishers, 1993.
- **★** Usmani, Mufti M. Taqi. Takmila Fathul Mulhim. Karachi: Idara Ma'ariful Quran, n.d.
- ★ Wahid, Kamal-ud-din Muhammad bin Abdul. Fathul Qadeer. Egypt, 1860.
- **★** Zafar, Usmani Ahmad. Imdadul Ahkam. Karachi: Maktaba Darul uloom, 1979.

References

- ¹ Usmani, Mufti M. Taqi. Islam and Modern Economics. PP 32 Karachi: Idara Al Marif, 1996.
- ² Usmani, Mufti M. Taqi. Islam and Modern Economics. PP 56 Karachi: Idara Al Marif, 1996.
- ³ Dogar, Prof. M. Akbar. Introduction to Economics. PP 225 Lahore: Mukhtar Brother publishing, 2002.
- ⁴ Saeedi, Rasool. Guide to Sahih Muslim. PP 1112 Karachi: Rumi Publications, 2000.
- ⁵ Usmani, Mufti M. Taqi. Rulings on Paper currency. PP 110 Karachi: Memon Islamic Publishers, 1993.
- ⁶ Qarzavi, Yusuf Al. Figh-ul-Zakat. PP 86 Karachi: Al Badr Publications, 1983.
- ⁷ Saeedi, Rasool. Guide to Sahih Muslim. PP 756 Karachi: Rumi Publications, 2000.
- ⁸ Usmani, Mufti M. Taqi. Rulings on Paper currency. PP 122 Karachi: Memon Islamic Publishers, 1993.
- ⁹ Saeedi, Rasool. Guide to Sahih Muslim. PP 802 Karachi: Rumi Publications, 2000.
- ¹⁰ Hakeem, Hafiz Abdul. Fatawa Hakeemia. PP 225 Lahore: Abdul Hakeem Research Institute, 1997.
- ¹¹ Saeedi, Rasool. Guide to Sahih Muslim. PP 802 Karachi: Rumi Publications, 2000.
- ¹² Ghaffari, Prof. Noor Muhammad. The Economic Life of Prophet Muhammad SAW. PP 115 Lahore: Dial Singh Liabrary, 1988.
- ¹³ Mufti Zainul Abideen, Intizamullah Shahabi. Tareek-e-Millat. PP 66 Lahore: Idara Islamiat, 1999.
- ¹⁴ Usmani, Mufti M. Taqi. Islam and Modern Economics. PP 106 Karachi: Idara Al Marif, 1996. And Saeedi, Rasool. Guide to Sahih Muslim. PP 365 Karachi: Rumi Publications, 2000.
- ¹⁵ Saeedi, Rasool, Guide to Sahih Muslim, Karachi: Rumi Publications, 2000.
- ¹⁶ Ahmad, Prof. Manzoor. Fundamentals of Economics. PP 56 Lahore: Ilmi Publishers, 2009.
- ¹⁷ Saeedi, Rasool. Guide to Sahih Muslim. PP 756 Karachi: Rumi Publications, 2000.
- ¹⁸ Usmani, Mufti M. Taqi. Takmila Fathul Mulhim. Karachi: Idara Ma'ariful Quran.
- ¹⁹ Farooqui, Muhammad Ali. Kashaf Istilahat al Funoon. Egypt: Muassa Al Misria, 1951.
- ²⁰ Dogar, Prof. M. Akbar. Introduction to Economics. PP 425 Lahore: Mukhtar Brother publishing, 2002.
- ²¹ Usmani, Mufti M. Taqi. Islam and Modern Economics. PP 97 Karachi: Idara Al Marif, 1996.
- ²² Abideen, Muhammad Ameen Ibn. Al Radd-ul-Muhtar. V 5 PP 256, Egypt, 1866.
- ²³ Wahid, Kamal-ud-din Muhammad bin Abdul. Fathul Qadeer. V3 PP56 Egypt, 1860.
- ²⁴ Farooqui, Muhammad Ali. Kashaf Istilahat al Funoon. Egypt: Muassa Al Misria, 1951.

- ²⁵ Usmani, Mufti M. Taqi. Takmila Fathul Mulhim. Karachi: Idara Ma'ariful Quran.
- ²⁶ Shafi, Mufti M. Alaat-e-Jadeeda k Sharai Ahkaam. V2 P302 Karachi: Idaratul Ma'arif, 1955.
- ²⁷ Thanvi, Molana Ashraf Ali. Imdadul Fatawa. Karachi, 1860.
- ²⁸ Kifayatullah, Mufti. Kifayatul Mufti. Karachi: PP 224, Sikandar Ali Publisher, 1868.
- ²⁹ Jameel, Mufti. Jameel ul Fatawa. Manuscript Lahore, 1986.
- ³⁰ Zafar, Usmani Ahmad. Imdadul Ahkam. V2 P115 Karachi: Maktaba Darul uloom, 1979.
- ³¹ Ali, Alauddin Muhammad Bin. Al Durr-ul-Mukhtar. V5 P126 Quetta: Maktaba Rasheedia, 1986.
- ³² Mahomedy, Abdulkader Cassim. "Islamic economics: still in search of an identity." International Journal of Social Economics, 2013: 556 578.
- ³³ Lakhnavi, Molana Fateh M. Ittar-e-Hadaya. V3 P445 Lahore, 2017.
- ³⁴ Usmani, Mufti M. Taqi. Takmila Fathul Mulhim. Karachi: Idara Ma'ariful Quran.
- ³⁵ Nujaim, Abne. Al Ishbah Wa Al Nazair. Karachi: Idara Al Quran, 1956.
- ³⁶ Dogar, Prof. M. Akbar. Introduction to Economics. PP 252 Lahore: Mukhtar Brother publishing, 2002.
- ³⁷ Ali, Alauddin Muhammad Bin. Al Durr-ul-Mukhtar. V5 P678 Quetta: Maktaba Rasheedia, 1986.
- ³⁸ Nakamoto, S. Bitcoin: A peer to peer electronic cash sytem. 2008.
- ³⁹ Sirer, I. Eyal & E.G. "Majority is not enough: Bitcoin mining is vulnerable." Communications of the ACM, 2018: 95-102.
- ⁴⁰ Antonopoulos, A. M. Mastering Bitcoin: unlocking digital cryptocurrencies. O'Reilly Media, Inc, 2014.
- ⁴¹ Nakamoto, S. Bitcoin: A peer to peer electronic cash sytem. 2008. And Antonopoulos, A. M. Mastering Bitcoin: unlocking digital cryptocurrencies. O'Reilly Media, Inc, 2014.
- ⁴² Sirer, I. Eyal & E.G. "Majority is not enough: Bitcoin mining is vulnerable." Communications of the ACM, 2018: 95-102.
- ⁴³ Rehmani, Molana Khalid Saifullah. Jadeed Fiqhi Masail. V7 p378 Lahore, 2018.
- ⁴⁴ Abideen, Muhammad Ameen Ibn. Al Radd-ul-Muhtar. V5 p376 Egypt, 1866.