SHARIAH & STAKING

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INTRODUCTION

INTRODUCTION & PREAMBLE.

Blockchain technology is being developed rapidly in the digital technology sector, as well as the global financial world. Blockchain is one of the break-through inventions in technology which may be useful to simplify the current financial system, especially the ones involving Islamic financial industry. Its development has the potential to bring a positive impact to all other industries including the financial industry.

As one of the fastest growing segments of the global financial system with an estimated compound of 17% since 2009, the Islamic finance's global assets had reached USD 3.374 trillion in 2020 and are further estimated to grow at USD4.95 trillion in 2025. The industry's continuous expansion resulted in Islamic finance gaining significance in a number of countries in Asia, Gulf Cooperation Council (GCC), and Middle East and North Africa (MENA). Considering the market volume which is continuously growing, and the necessity of Islamic population to conduct transactions based on shari'ah principles, Esquare is interested in looking if merging the blockchain with the Islamic finance principle is permissible. Not only because the Islamic finance should be up-to-date with the current technology, but also due to the similarities which they both share in their rules and principles. As we might know, blockchain is a distributed database containing records of all transactions and/or digital events that have been executed and shared among participating parties. More importantly, no participant can manipulate the data in a blockchain as each transaction is validated by every participant of the system using consensus algorithm, and it contains every single record of each transaction. This ground rule of blockchain is what we believe is synchronized with Islamic principle, where it is free from manipulation and everything in the system is presented with full clarity.

One of the derivative products in the financial industry dependent on blockchain is cryptocurrency, which is being used in transactions of currency, trading commodity, and security. Crypto holders might use staking transactions; an activity to lock a portion of cryptocurrency for a certain period of time as a way of contributing to a blockchain network. It is available to cryptocurrencies which use a proof-of stake model. In exchange, stakers will be rewarded in a form of additional crypto assets. Simple analogy in staking transactions is similar to time-deposit in banks, whereas the customer needs to submit a certain amount of money for a certain period of time in order to get profit. In this white paper, we will dissect on what is halal crypto-staking, and how crypto-staking could be considered to be sharia compliant

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OBJECTIVE STATEMENT:

This white paper is purposed to address the analysis on whether staking cryptocurrency is permissible under sharia principle. In order to analyze crypto-staking being shari'ah compliant, we need to first shed light on the basic principles of Islamic finance that prohibit the following elements: i) interest (Riba), ii) speculation (Maisir), iii) uncertainty and excessive risk (Gharar), and iv) investing in prohibited activities (i.e., brothel, liquor business, bookmaker etc). Among many variants of crypto transactions, we shall analyze whether staking falls under the mentioned four prohibited areas or contrary to above mentioned limitations it is compliant with principles of shari'ah

STAKING & IT`S MECHANISM

STAKING AND ITS MECHANISM

BACKGROUND:

From a user's perspective, staking allows a trader to commit their cryptocurrency for a certain period of time and earn rewards through a passive income. This does not require setting aside certain amount of money and getting rewarded as a result of it, instead it involves investing digital assets somewhere and in return a reward from the profits of such an investment in the same digital asset is earned.

For the block chain, staking supports a network (such as Ethereum) in confirming transactions. It is viable for coins that use a proof-of-stake model, which is a more efficient way than the proof-of-work model (such as Bitcoin).

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WHAT IS STAKING?

Staking involves the proof of stake concept whereby individuals with various cryptocurrencies solve for blocks and participate in the consensus mechanics. Staking involves committing your crypto assets to support a blockchain network and confirm transactions.
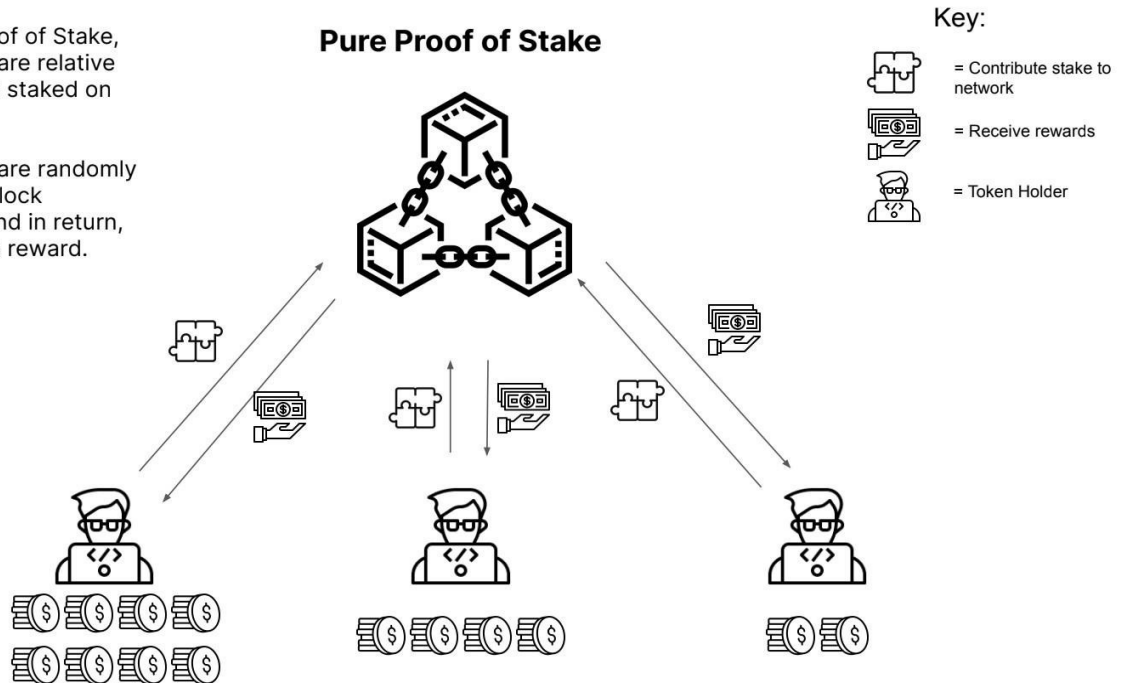
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TYPES OF STAKING

1 PURE PROOF OF STAKE:

With Pure Proof of Stake, your rewards are relative to the amount staked on the network.

Users tokens are randomly selected for block verification, and in return, they receive a reward.
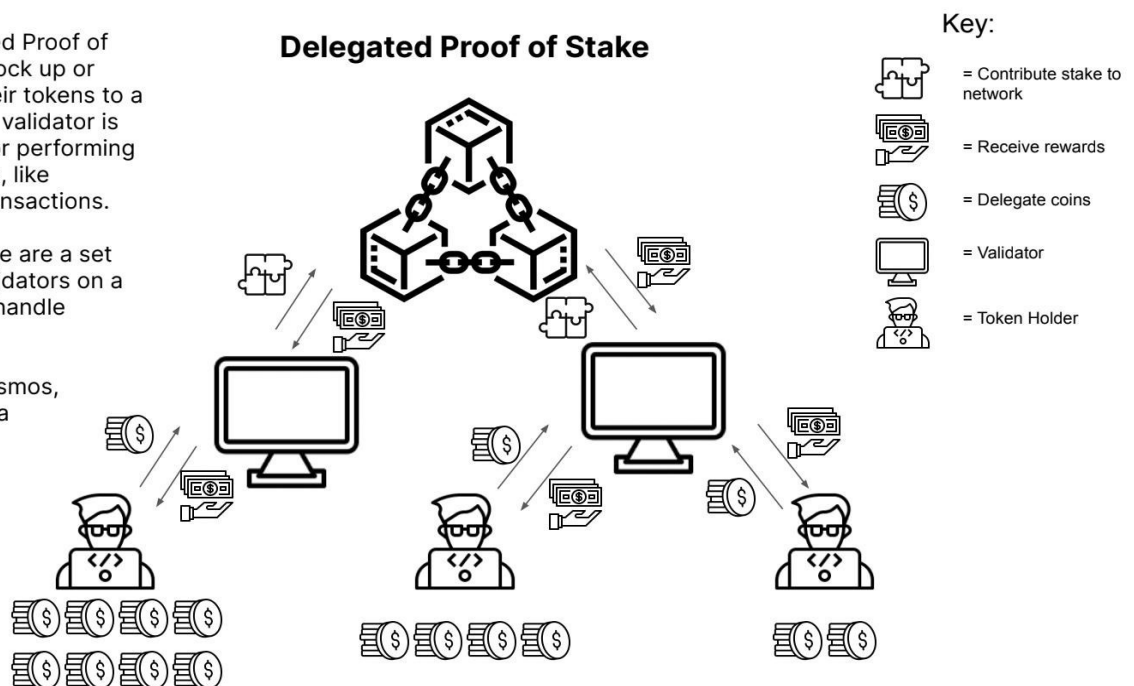
Example:
Algorand

Pure Proof of Stake

Key:

= Contribute stake to network

= Receive rewards

= Token Holder

2 DELIGATED PROOF OF STAKE:

With Delegated Proof of Stake, users lock up or "delegate" their tokens to a validator. The validator is responsible for performing network tasks, like confirming transactions.

Typically, there are a set amount of validators on a network that handle consensus.

Examples: Cosmos, Polkadot, Kava

Delegated Proof of Stake

Key:

= Contribute stake to network

= Receive rewards

= Delegate coins

= Validator

= Token Holder

TYPES OF STAKING

3 DELIGATED PROOF OF STAKE {Rewards accrued by Validator) :

With some Delegated Proof of Stake models, the rewards are accrued at the validator level. It is the validators responsibility to distribute these rewards among their delegators.

Examples: MINA, Tezos

Delegated Proof of Stake: Rewards accrue to Validator

Key:

= Contribute stake to network

= Receive rewards

= Delegate coins

= Validator

= Token Holder
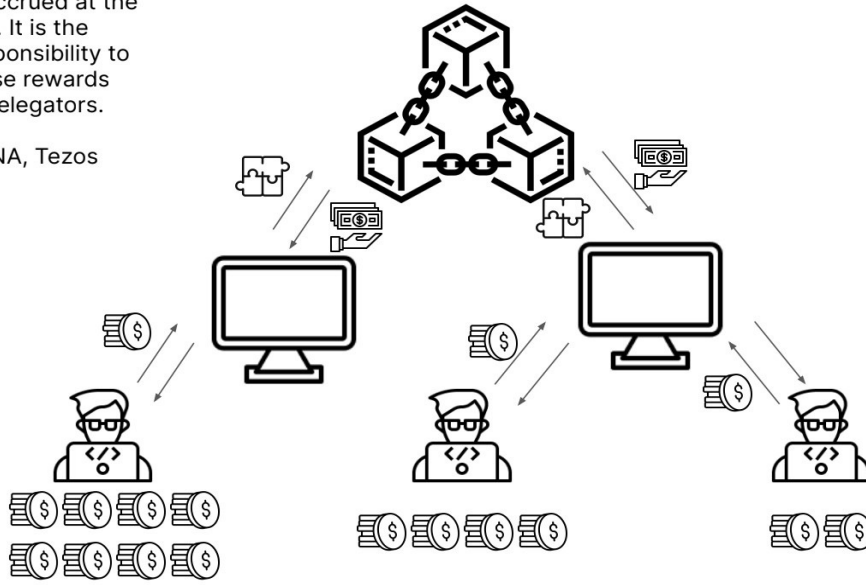
4 NODE STAKE:

Some networks have a 1:1 relationship between node and staker, meaning, in order to stake tokens on a network, users must spin up a node to do so.

This type of staking consensus incentivises users to distribute their stake across multiple validators, helping increase shared security, and decentralization.

Examples: Helium, NuCypher, Cardano

1:1 Node Staker

Key:

= Contribute stake to network

= Receive rewards

= Validator
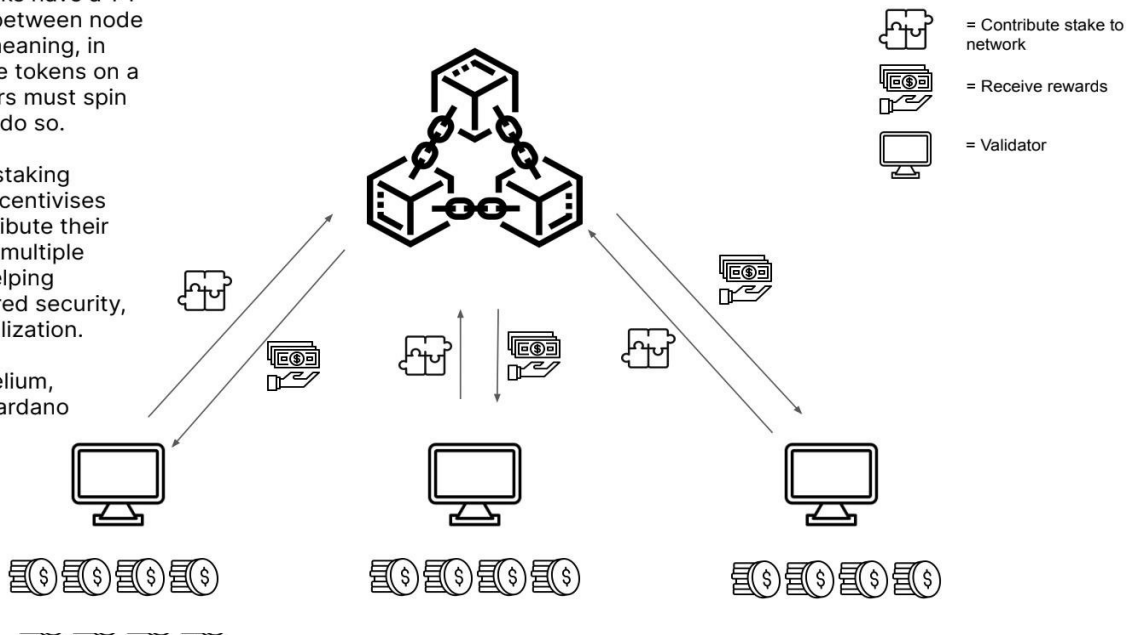
TYPES OF STAKING

5 COLLATOR:

Collators, or block producers with the highest stake in the network join the active pool. Token holders can add to the collators' stake using their tokens through a process called nomination (also referred to as staking).

Collators receive rewards, and these rewards can be shared with their nominators, based on their contribution to the aggregation of transactions to be validated on the consensus layer.

Examples: Moonbeam, Centrifuge, Acala

Collator

Key:

= Contribute stake to network

= Receive rewards

= Delegate coins

= Collator

= Token Holder
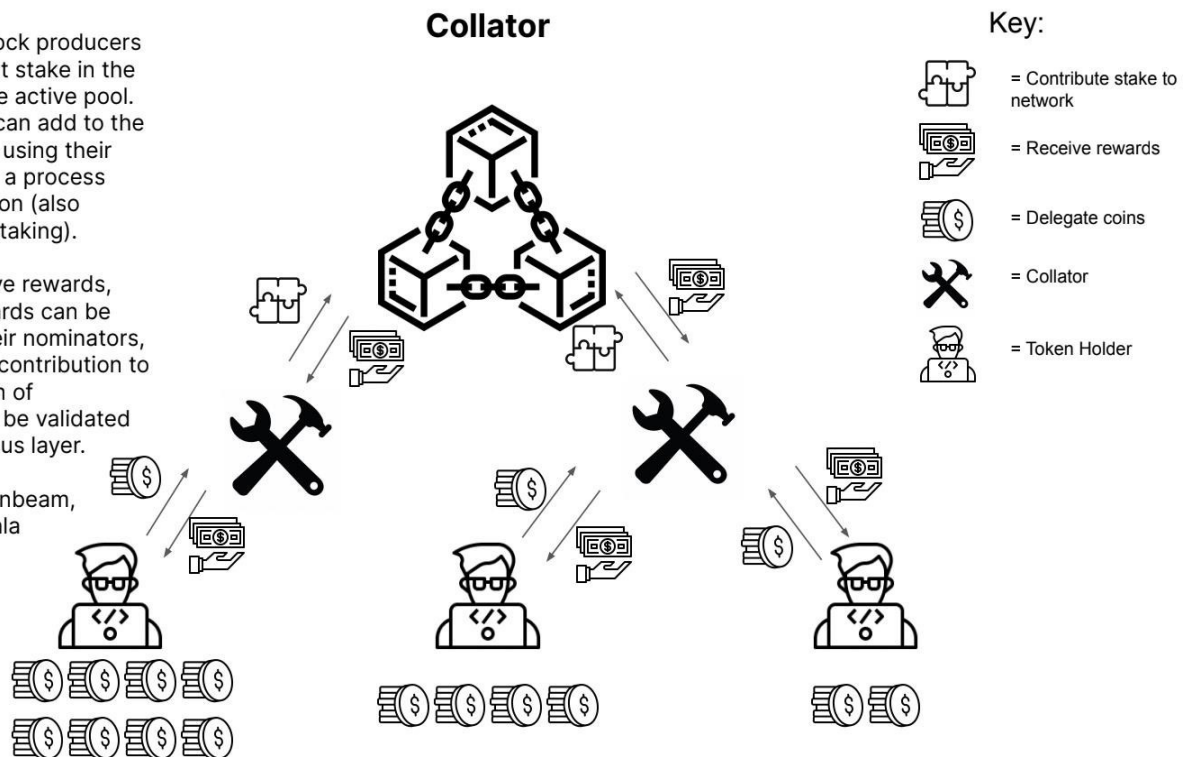
SHARIAH`S PERSPECTIVE

Status of Staking from Shariah Perspective

Islamic religion expressly lays down its principles for most things that occur in the day-to-day lives of human beings, declaring some activities to be halal while others to be haram. However, there are some areas where nothing is expressly or impliedly said and the religion is silent on the particular matter, in such circumstances it is believed that if that particular matter is not contradicting with the general principles of Islam and is not contrary to the basic beliefs it is most likely to fall within the orbit of Islam.

There are different statuses regarding crypto currency in Islam:
a) **Crypto as Currency**
b) **Crypto as an Asset**
c) **Crypto as Security**

Status of Staking from Shariah Perspective

Before getting into the debate of status of crypto and staking in Islam, we need to understand the following terminologies:

1. Riba:

Riba in the English language translates to "interest". Riba is an Islamic word known as usury. It is an act of unjust/exploitative gains or growth made in trade or business during any transaction.

As said by Prophet Muhammad (PBUH) in a Hadith:

"Curse upon the accepter of interest and its payer, and one who records it and the two witnesses" (Jabir)

The term Riba in Islam is further divided into two kinds:
a) Riba Al Fadl:
It refers to the exchange or sale transaction in trade which effectively results in the charging of interest through the exchange of the same commodity, but of different quality or quantity.

b) Riba al Nasi'ah:
It refers to the delaying of completion of the exchange, with or without an increase of profit. It is also known as Riba al jahilliyah.

2. Gharar:

Gharar is Arabic word which means "danger" and in English language it is also known as hazard. Gharar mean sale of an object which is not present. It is one of the important concepts of Islam which is related to deception. It can be divided into several components out of which the two basics are:

a) **Tadlis:** Cheating in business.

b) **Ghaban:** To deceive someone.

Famous examples to understand the concept of Gharar in Islam includes: "unborn calf in its mother womb" and "sale of X at time t+1, where the price will also be determined at t+1" As stated in Quran:
"Squander not your property amongst yourself unjustly except it be a trade among you by mutual consent" (Surah al-Nisa 4:29)

Status of Staking from Shariah Perspective

3. Maysir:
Maysir an Arabic terminology means "gambling". It can further be defined as something that is gotten very easily or getting a profit without making any effort and without having to work for it. It is a game of chance which is prohibited in Islam.

Maysir stood for a game with unfeather or headless arrows. Gambling and games of all kinds which includes chances have been prohibited in Islam.

As stated in Quran:
"They question the about strong drink, and games of chance. Say: In both is great sin, and (some) utility for men; but the sin of them is greater than their usefulness" (Al-Quran 2:219)

4. Maal:
Maal is an Arabic word defined as something in one's ownership. It includes all those things which are capable of being owned (al-qamus al-muhit).
There are two different schools of thought on the definition of Maal:

a) Hanfi: According to them maal is what human instinct inclines to and which is capable of being stored/hoarded in the time of necessity.

b) Non-Hanfi: According to them Maal is what gives benefit or prepared to give benefit. The major examples of Maal includes, gold, animals, plants, etc. things which cannot be possessed are not considered as Maal such as birds in air or fish in the water. Maal further includes both tangible and non-tangible assets such as electricity and trademark.

STAKING & ISLAM

STAKING & ISLAM

Staking is one of the products of crypto and is considered to be the latest blockchain technology. Staking cannot be questioned to be halal or haram on the grounds of its mechanism which is PoS, however, the process can be only questionable on the basis of the specific blockchain used to stake the coin. Esquare want to look at ways of staking that doesn't challenge the limitations of Islam.

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WHAT IS STAKING?

Mechanism of Staking & Islam:

Mechanism:
The mechanism of staking includes a specific amount of coins which are placed in the eco-system and they are validating the transactions that are taking part in the ecosystem whilst getting rewards from the transaction fee. Simultaneously, they are holding the ecosystem so that it can be sustainable enough (further making it clear staking and lending have different mechanisms and cannot be confused with one another).

Rewards on Staking are being calculated on the following things:
  a) how money coins are being staked
  b) how money validators have been actively staking
  c) how money coins are staked on the network in total
  d) inflation rate
  e) other factors

STAKING & ISLAM

Islamic point of view on mechanism:
There are different Islamic maxims available which pave the path towards the advancement and acceptance of new technologies. One of the Islamic legal maxims that encourage accepting products such as staking is:

"Necessity renders prohibited things permissible".
(Majjalah, No.21)

The details of the above mentioned Islamic legal maxim can be found in **"Ahkaam ul Sarf"**. Another leading Islamic legal maxim states:

"Permissibility is the original state of things"
(Details of this maxim can be found in istishab)

In the light of above stated Islamic maxims it can easily be deduced that it has become one of that necessity of the Islamic World to consider staking product as halal because almost all the major organizations/companies/exchanges are running this product and in order to provide equal opportunity to the Muslims we need to address this issue at earliest for the benefit of Muslims at large. On the other hand, the principle that is used the most in Fiqh is "Istishab" which means that the original rule for all things is permissibility. The presumption is that all items are permitted unless prohibited by Islamic Law. The principle of istishab was accepted by Imam Al Shafi'i and some of its types by the Hanafis such as Al-Karkhi and Al-Sarakhsi. It is commonly accepted that Islamic Law furthers the interest of human beings (maslahah). These interests may modify in different circumstances. There is no doubt that this principle should be treaded upon carefully. Fully acknowledging the fact that there wasn't any prohibition regarding the digital currencies/staking and as crypto/staking has been proven to be a beneficial asset for everyone without challenging the limitations of Islam, it can be legalized within the domain of Islamic law upon the bases of rule of Istishab.

STAKING & ISLAM

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Staking & Elimination of Prohibited objects narrated in Islamic finance:
In the PoS there isn't a single element that can be considered as haram in Islam. In the light of above-mentioned mechanism of PoS and the Islamic legal maxims quoted above, if there isn't any Islamic limitation applicable on staking, it will be deemed to be halal.

As explained above one of the major elements of Riba is the profit that is returned with the principal quantity, in staking the return is not guaranteed but the increment of quantity of coins is in the form of rewards. Staking can assure you the increment in the quantity of coins after they are redeemed but it cannot assure whether it will also give increase to the price of the coins. Staking in the context of PoS is more like a share in a business activity of validating the transaction on the blockchain.

Staking is not a zero-sum game like gambling where after staking you will have a risk of losing everything, stake by validators can be perceived as form of collateral which is locked in system. Fluctuation in the price of assets on daily basis negates the concept of Riba and it includes no guaranteed income which is also unlike the concept of Riba.

Example: A person resides in house on rent and pays the rent amount to the owner but does not hold the ownership of house, the increase in the value of house throughout the time period of tenancy does not amounts to Riba.

Gharar is another major factor in Digital products, as we discussed that gharar mean the risk association but after knowing the whole mechanism of staking it is clearly indicated that there is no uncertainty in it and all the details are already known as the coins staked are already in the possession and ownership of the same person.

Maysir, as defined above is prohibited because monetary gains or profits are derived from mere chances whereby one-party wins over the expense of all others but in staking there are no gains or profits attained over the expense of others. Coins rewarded are in the form of transaction fee and not from the deduction of someone's wealth or coins.

Conclusion

CONCLUSION

In the light of above-mentioned research of Staking Experts, Crypto Experts and Shari"a Experts it is hereby concluded that Staking is one of the major component/product of blockchain technology. Keeping this in mind Crypto on which staking is working should be one that is Shari"a Compliant as well.

Shari,a always supports the advancement in the field of technology and never discourages the progress. Staking is based on latest blockchain technology which by no means violates any principles or rulings of Islam. No element of "Gharar", "Riba" and "Maysir" can be found in staking which clearly depicts that Shari'ah doesn't bar Muslims from using this latest technology/product. The protocol of Stake as described above is considered to be more like a share in any business, with the exception that this transaction is validated on the blockchain, because of which all the elements through which staking can be called haram are eliminated.

The main motive of this Shari'ah White Paper on staking is to invite all the Financial Advisors and Islamic experts to review this paper so that Islamic World can be given an equal opportunity to progress in this technology. This also serves as an invite to the Muslim Ummah to reap the benefits of this technology in the coming times. Further research for more clarification on the matter by any Islamic institute and Shari'ah experts is encouraged.

Letter From Research Scientist on Staking

Dear Crypto Friends,
It is matter of immense pleasure to be writing this letter. Following are the salient features of staking:

Overview of staking:
Staking is a mechanism that rewards the involvement of network participants with rewards on staked assets but put it to work to ensure the robustness of the consensus mechanism, aiding in the processing of transactions and overall security.

Purpose of shariah staking:
The purpose of Sharia staking is to ensure that rewards earned from such staking is always in accordance with Islamic teaching of earnings. Muslim community is always concerned about the source of income whether it is halal or haram.

Releasing of the staked coins:
Your coins are still in your possession when you stake them. You're essentially putting those staked coins to work, and you're free to unstake them later if you want to trade them. The unstaking process may not be immediate; with some cryptocurrencies, you're required to stake coins for a minimum amount of time there is a defined time period for which such coins must be staked to earn rewards and it can be flexible to stake and get rewards based on locked period.

Price of staked coin:
There is no concept of staking the price of coin. The only obligation for the user is to put coins for staking that can be in between the maximum and minimum limits defined by staking companies against each coin. In return the user will get rewards in the form of increment of the same coins that are staked.
However, the market price of the staked coins can appreciate or depreciate during the staked period, but the coins quantity will remain the same. Therefore, we can say that user will always be beneficial in terms of coins quantity that is principal quantity plus reward coins on top of it.
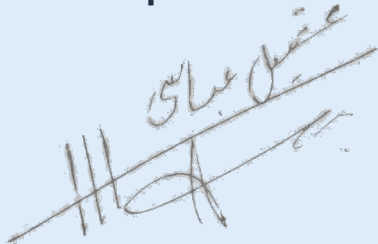
Example of staking:
Let us consider a user who has 100 SOL and user wants to stack them and earn rewards on top of it. The estimated annual percentage yield for SOL is 10% that means if user staked the coins for 1 year with 10% return rate, then after completing one year the user will get reward of 10 SOL coins on top of principle coins that was 100 SOL. So, in total the user will have 110 SOL coins.
In continuation to above example let's say the user bought 100 SOL at 40$ per coin and after one year the SOL market value can be more than or less than the bought value. However, the user will always be in beneficial state in terms of coin amount/quantity that is after one year user will have 110 SOL means 10 additional coins.

 I believe that the above-mentioned features will help you in Knowing staking much better.

Thank you.

APPROVED & ENDORSED BY:

(Allama Aqeel Ahmed Abbasi)　　　　　　　(Allama Ustad Fida)