# Embracing of Fintech in Islamic Finance in the post COVID era

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Abstract—The novel corona virus (COVID-19) is a phenomenon with the aftereffects of this pandemic can be felt in the next few years to come. Economic consequences of the pandemic are huge on the Islamic finance industry, it is also evident from the slow growth forecast by the various agencies for the industry. In this paper, we consider this pandemic as an opportunity for the Islamic finance industry to grow and prove its worth again after the global financial crisis of 2008 and emerge as a major contender to the conventional financial system. We develop a model which reveals that COVID-19 is an opportunity with more integrated and transformative growth with high level of standardization, with key focus of the industry on the social cause and tactical adoption of Financial technology. The paper has an implication to the Islamic finance and banking industry as it provides a framework for the future researchers and practitioners to understand and adopt Islamic finance in the post COVID-19 era. Keywords- Financial contagion; Sustainable finance; Post-COVID-19; Islamic Finance; FinTech. I. INTRODUCTION After the widespread of COVID-19 globally, several

surveys and studies have been conducted to measure its adverse effects on the various sectors of the economy. Though the future is still uncertain, but the negative socioeconomic consequences of the pandemic has been observed. For instance, the crash of the global stock markets in mid-February 2020 resembles the decline during the global financial crisis 2007-2008 [1]. However, unlike the global financial crisis, the pandemic is caused by exogenous factors which has impacts on the real economy and therefore may lead to long term economic recession. These concerns are reflected in statistics such as the increase in the unemployment rate in United States to reach 14.8% in less than two months after the spread of pandemic [2].

As the level of uncertainty increases during crises periods, investors tend to turn to haven investments to protect their wealth. Few studies have indicated that gold and cryptocurrencies have not proven to be safe havens during the beginning of the outbreak of COVID-19 [2]. On the other side, due to low risk of Islamic finance investments and their superior performance during the global financial crisis, inquires have been raised on whether they will show similar performance during and post COVID-19 period. The low risk of Islamic finance investments is due to its unique characteristics such prohibition of *riba, gharar, maisir,* and excessive speculation [3].

In this paper, we propose a model which utilizes financial technology (FinTech) in Islamic Finance to provide standardization, transformative growth as well as has a social dimension. In other words, it considers the pandemic as an opportunity for advancement and progression [4]. We argue that Islamic finance can play a vital role in the recovery of economies in the post COVID-19 era due to its principles and recognition as an ethical finance. Islamic finance has several financial services like, *Qardh-Al-Hasan, Zakat, Waqf* and *Social Sukuk* which are tailor made for the crises and pandemic-like situations [4] [5].

The paper proceeds as follows. We provide an overview of Islamic finance in Section II. We discuss the role of Islamic finance in post COVID-19 era in Section III. We investigate the role of Islamic FinTech in post COVID-19 in Section IV. We propose the use of FinTech in post COVID-19 in Section V. We conclude in Section VI.

# II. IN SERACH FOR 'THE SOLUTION': DOES ISLAMIC FINANCE HAVE THE SOLUTION

During the financial crisis of 2008, Islamic finance has performed better than the conventional financial system and provided the hope to the finance world and established itself as the main contender to the conventional financial system [6]. There is an emerging view that suggest that Islamic finance has the required ingredient to again emerge as the winner [1]. Islamic finance is associated with collaborative financial system in many ways. The rules and regulations of Islamic finance are different from traditional financial system. It strongly prohibits excessive interest (*riba*), gambling (*maysir*) and ambiguity (*gharar*) [7]. It is a clear that the two crises, the financial crisis and the current pandemic, are different in nature, but the question is whether the Islamic finance has a remedy for the new crisis?

The answer lies in the process by which Islamic finance is carried out and the operations of Islamic financial institutions. Islam is a complete code of life and it has

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solution to everything and so is the Islamic finance, it has solution to every problem and challenges it faces [8]–[10]. However, it is essential to make sure on how Islamic finance principles are implemented. We will discuss in the following section how Islamic finance can lead the finance world in post COVID-19 era to mitigate the economic consequences posed the current pandemic.

▶ There are two basic characteristics of Islamic finance on which it is evaluated:

1) It can be argued that Islamic finance will have very little or even no negative impact since:

> Interest is strictly prohibited by the Islamic finance and Islamic financial institutions are not involved in *riba* based transaction.

Solution Islamic finance does not encourage the derivative products like, options. Futures and swaps and it also discourage the transactions with very high risk (gharar).

2) Islamic finance is expected to deliver a significant contribution in the field of finance in recovery post COVID.

▶ Islamic economy is based on the principle of asset backed financing and money is just a medium of exchange and is not treated as commodity. Instruments like social Sukuk, Murabaha are financed with the asset backing only.

M. Allias, a well-known and respected economist and Nobel laureate has suggested that structural reforms are the only way to deal such huge crises [11]. Figure 1 provides an overview of the model of Allias (2013).

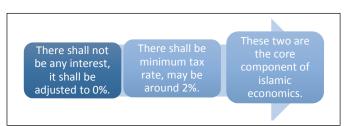


Fig. 1. An overview of Allias's (2013) model

The fundamental principles of Islamic finance are profit sharing (PLS) and prohibition of interest (riba) based transactions. Islamic prohibits *riba* as it is something which is prohibited from *Qur'an* as well as *Sunnah* [15]. Islam prohibits interest (*Riba*) due to the following reasons: First. *Riba* is prohibited to promote and ensure equity in exchange transactions as it is evident from the *riba* based transactions that the poor are exploited by the big money lenders. Any kind of injustice and unequal behavior is strictly prohibited in Islam as it always protects the poor from the evils of the rich and powerful. The other reason for prohibition of *riba* is that Islam considers all *Ummah* brothers and sisters and they should need to help each other in case of need and promote charity and helping others through kindness. Finally, Islam considers money as medium of exchange and it shall not be treated as commodity. Prohibition of *riba* in Islamic finance upholds that Islamic finance is the financial system with zero tolerance to the interest based transactions and it is based on the profit and loss sharing basis (PLS method) [16].

### III. THE ROLE OF ISLAMIC FINANCE IN POST COVID-19 ERA.

It can be argued that the strong foundations of Islamic financial system make it capable to overcome every challenge posed by a crisis like current pandemic or any other financial crisis [1]. Though the pandemic has slowed down the growth forecast for almost every major Islamic economies including Iran, Saudi Arabia, Malaysia and Turkey, but the recovery is expected to be V-shaped for the Islamic finance based economies [17] [18][19].

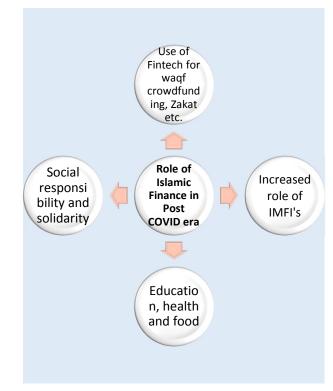


Fig. 2 Role of Islamic finance in the post COVID-19 era

Islamic finance is basically an ethical finance and its core values are based on the principles of ethics and morality [20] as well as it promotes the social well-being of the poor and vulnerable sections of the society. It has some tailor-made social instruments such as, Qardh-Al-Hasan, Zakat, Social Sukuk and Waqf to help the and fight the emergency like situation. Islamic banks and financial institutions can utilize these financial instruments to direct cash transfer to the poor, vulnerable, SMEs and individuals during and after the COVID-19. These financial services can easily be linked to the financial technology (Fintech) and direct cash can be transferred to the beneficiaries on their account [5]. Islamic finance is based on the principle of social justice and equitable distribution of income, these principles can be extensively used during crisis [21]. Figure 2 shows that Islamic finance is expected to play a huge role in recovery of the economies in post-COVID-19 era. The fintech based financial instruments like, waqf, crowdfunding, Zakat, Qardh-Al-Hasan etc. can be utilized to fight the aftereffects

of COVID-19 and help in fast recovery. The role of Islamic microfinance institutions (IMFIs) is vital due to its ability to reach neglected and remote sections of the society [22].

## $IV.\ \mbox{COVID-19}$ and Role of islamic fintech

Islam is open to any innovation or disruption if it does not violate the ethos, pillars and principles of sharia and it is not against the principles of *Qur'an* and *Sunnah*. Islamic Fintech are new series of innovations and disruptive technologies which uses technologies in providing financial services which are faster, accurate, transparent, and less costly [23][24]. Fintech is already a phenomenon that is growing at an unprecedented pace [25]. Fintech based financial services are very popular among the Islamic finance customers, furthermore, the lock downs, during COVID-19, have provided further advancement and enhancement for FinTech. There has been around 72% increase in the users of Fintech is going to be the game changer for Islamic finance mainly due several reasons as shown in figure 3 [26]–[28].

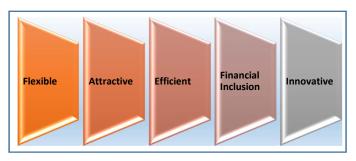


Fig. 3: Characteristics of Islamic FinTech. Source: adapted from Rabbani et. al., 2020

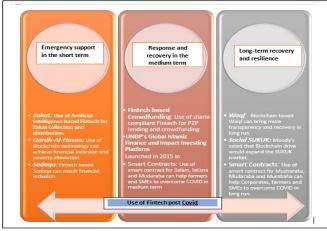


Fig. 4 Use of FinTech in the post COVID-19 era Adopted from (Hassan et al. 2020).

Figure 3 indicate that fintech based Islamic financial services are flexible as it can also be customized to the specific needs of the customer. It also looks attractive especially to new millennial generation who are tech-savvy. The Fintech based services are efficient and it also promotes financial inclusion because it provides an opportunity to neglected and ignored section of society to come in the main stream and use the valuable financial services [29], [30]. Finally, Fintech based financial services are innovative and it has ability to be the game changer for Islamic finance in the post COVID-19 era [31].

#### V. USE OF FINTECH POST COVID-19

Islamic finance is best positioned and well suited to fight the economic consequences of COVID-19 and emerge as the winner due to its wide range of ethical and flexible financial services [32]. Figure 4 presents an overview of the Fintech based Islamic financial services which can be utilized to mitigate the adverse economic impact of the pandemic. According to our model presented in Figure 4, Islamic Fintech has the solution and required ingredient to fight the economic adversities post COVID-19. The proposed model can be explained as follows:

Islamic finance is based on the principles of ethics and morality and its services are designed keeping in view the requirements and needs of the poor, marginalized and deprived section of the society. The proposed model as depicted in the figure 4; is divided into three parts, Emergency support in the short run, response and recovery in the medium term and finally Islamic Fintech based tools required in the long run.

**Emergency support in the short run:** When it comes to the support in the short run, *Zakat, Qardh-Al-Hasan* and *Sadaqat* can be utilized to direct transfer of cash to the poor and needy. If these services are customized with the Fintech based technologies such as artificial intelligence, Blockchain and Natural Language Processing (NLP), it can help in achieving broader objective of poverty alleviation and financial inclusion [5].

**Response and recovery in the medium term:** The after effect of the current pandemic is going to be felt for a relatively longer period where small-medium enterprise (SMEs) and organizations with a small capital base will find it hard to survive and maintain its growth. Islamic Fintech based financial services such as, crowdfunding and sharia compliant P2P lending can be a viable option to help and support these organizations. Moreover, smart contract based *Murabaha, Mudaraba* and *Musharaka* contract can be executed to help these industries to fight and survive in the medium term [33], [34].

**Long-term recovery and resilience:** The pandemic is not going to end soon and after effects will be felt in the years to come. Islamic finance has the some of the tailor-made financial services which can be utilized in the long run along with the Fintech to help and fight from the economic damage caused by it. COVID-19 is a global pandemic and it has taken the economic activities to a standstill, due to the lockdown and social distancing measures to restrict the spread of the virus. The economic damage caused by these lockdown are very severe and it will take years for some industries like aviation, hospitality and tourism industry to recover [35], [36]. Islamic finance can utilize Blockchain based *Awqaf, social Sukuk* and smart contract based Islamic financial services to help these industries recover and maintain its growth [19]. Aw

### VI. CONCLUSION

In this paper, we argue that Islamic finance have the required impetus to mitigate the economic consequences of the COVID-19 pandemic in the short run, medium term as well as in the long run. If Islamic financial services are combined with the Fintech, Blockchain and artificial intelligence, it can help in quick recovery from the economic damage caused by the pandemic. We proposed an Islamic Fintech based innovative model which will facilitate the operations Islamic banks and financial institutions if implemented properly. The model combines Islamic finance with the Fintech based technologies such as, artificial intelligence, Natural language processing and Blockchain to achieve the broader objective of removing income inequality and bringing economic justice. The model argues that the merge between Fintech and Islamic finance may help to turn the pandemic to an opportunity for growth and digital advancement of Islamic finance products. Our proposed framework considers a high level of standardization as well as it focuses on the social cause and tactical adoption of financial technology. The limitation with the present model is that it is yet to be tested practically with the empirical data.

The future research can be carried out to test our model practically with real life cases. It would be interesting to empirically test the model and see the result. The outcome of the model will be helpful for the financial institutions, policymakers, researchers and other stakeholders in the time to come.

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