



## Integrating Islamic Fintech into Islamic Social Finance to Revive the Going Concern of MSMEs in the COVID-19 Era

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**Abstract:** This study seeks to propose a model that integrates Islamic social finance and Islamic fintech to revive MSMEs' going concerns during the COVID-19 pandemic in Nigeria. The study applies content analysis and a multidisciplinary literature review. This study proposes a model that integrates Islamic social finance instruments (such as *zakat* [Islamic compulsory tax], *waqf* [Islamic endowment], Islamic microfinance and *sadaqat* [voluntary charity]) and Islamic fintech platforms (P2P and crowdfunding) that could enable MSMEs to obtain funds to revitalize their going concerns by engaging in various Islamic-based contracts, such as *musharakah* (equity partnership), *murabahah* (the cost-plus sale contract), *mudarabah* (trust partnership), *ijarah* (lease contract), *musharakah mutanaqisah* (diminishing equity partnership), *qard al-hasan* (free interest loan), *salam* (forward financing transaction), etc. The provision of adequate finance using the proposed integrated model is expected to revitalize the MSMEs' going concerns, which can contribute to the country's economic growth and development. Despite the study's contribution by inventing an Islamic-based model for reviving the MSMEs' going concerns in Nigeria, it is conceptual without empirical validation. Hence, future studies should empirically explore the feasibility of the proposed integrated model. The implications of the findings indicate the need to provide motivational regulations for establishing Islamic fintech companies. There is also a need to provide effective technological applications that ensure the selection of only eligible beneficiaries.

**Keywords:** COVID-19, Islamic Social Finance, MSMEs, Islamic Fintech (Peer-to-Peer Lending and Crowdfunding), Going Concern, and Nigeria.

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## Introduction

The emergence of the Novel Corona Virus (COVID-19) pandemic brought unexpected and immeasurable damage to all aspects of life across the globe. No country in the world has not suffered the consequences of the pandemic, even though the magnitude differed. The pandemic exposed the world to health and economic problems (Umar, 2021). It led to the loss of lives and disruption of the global economy (Hudaefi & Beik, 2021). It also awfully worsened the socio-economic development of people and economic growth and development across the globe (Umar, 2021). According to Jackson et al. (2020), the pandemic crisis has topped the previous cases like the Great Depression, World War II and the global financial crisis of 2007-2008. Implementing various measures (such as restriction of movement, social distancing, and quarantines) to prevent the spread of the virus slowed down economic activities across the globe (Hudaefi & Beik, 2021). In other words, these measures to curtail the virus's spread threatened the operations and solvency of businesses across numerous economic sectors,

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especially small ones (ILO, 2020). Also, SMEs and low-income and daily wage workers really suffered the consequences of COVID-19 (Hassan et al., 2020).

Moreover, even before discovering the COVID-19 pandemic, MSMEs (Micro and Small Enterprises) face some challenges. One of the notable challenges they faced, particularly after the global financial crisis between 2007-2008, was access to finance for their survival and growth (Lajis, 2017; Lu, 2018; Ghazali & Yasuoka, 2018; Bella, 2020). Access to finance is life-or-death for MSEs in developing countries (Kebede & Abera, 2014). This challenge is not only an issue in developing countries but also in developed ones. For instance, SMEs accessed only 17 percent of total bank loans in the UK, while the remaining 83 percent was given to big companies because the banks have become risk-averse after the global financial crisis (Lu, 2018).

One thing that clearly pointed out the strategic importance of MSMEs was the special and adequate attention given to them during the extraordinary virtual summit of the G20 Heads of State hosted by the center of the global battle against the socio-economic impact of the COVID-19 pandemic (Hajjar, 2020). This is because their contributions to creating jobs and economic growth and development across the globe have been widely acknowledged (Lajis, 2017; Ghazali & Yasuoka, 2018; Lu, 2018; Hui et al., 2019). Consequently, finding a viable way to revive their going concern has become a worldwide topical issue.

Financial technology (fintech) has been recognized as a better tool for providing a long-lasting solution to the financial challenge of MSMEs worldwide. Fintech has become an emerging discipline that combines finance and information technology (Ryu, 2018). The fintech industry has grown exponentially, providing innovative business models, especially after the global financial crisis (Ali et al., 2018). The industry offers a better alternative source of adequate funds to MSMEs for their operations and growth (Ghazali & Yasuoka, 2018; Jamil & Seman, 2019; Trimulato et al., 2021). The concept of Islamic fintech is now a topic of discussion among academics and professionals (Hasan et al., 2020; Hudaefi, 2020). Islamic fintech entails the integration of Islamic finance with technology. Islamic fintech is secure and operates in accordance with Islamic laws by providing products that are free of *riba* (interest) and *gharar* (uncertainty) (Wijayanti & Yandra, 2021; Dwijayanti et al., 2022). Islamic fintech projects were estimated to reach \$128 billion by 2025 (DinarStandard & Elipses, 2021). According to Hassan et al. (2020), it is a powerful tool to address the challenges caused by the COVID-19 pandemic.

Moreover, the emergence of Islamic fintech aids customers in resolving their financial problems by offering a range of products, including investing, lending, and crowdfunding (Wijayanti & Yandra, 2021). Consequently, many Islamic fintech firms currently operate in Muslim and non-Muslim countries, such as the UK, the US, France, Sweden, Italy, Russia, and Switzerland. According to the Islamic fintech report for 2018 released by the DIEDC, 93 Islamic fintech firms were found across the globe, out of which 65 provided P2P services for facilitating consumer and business financing. This signifies the potential of Islamic fintech firms to provide sufficient funds to MSMEs in Nigeria.

Besides, Islamic finance can accommodate the underprivileged in a social safety net through *zakat*, *sadaqat*, and *waqf* to enable these people to satisfy their daily needs (World Bank, 2020). In a broader sense, it consists of traditional Islamic institutions based on philanthropy (e.g. *zakat*, *sadaqat* and *waqf*), cooperation (like *qard al-hasan* and *kafalah*) and modern Islamic microfinance, which contribute to poverty alleviation (IRTI, 2015; IRTI, 2020). Historically, *zakat* and *waqf* played a significant role in poverty alleviation in Islamic society. Umar et al. (2022) established the potential of Islamic microfinance to alleviate poverty caused by the COVID-19 pandemic in Nigeria effectively. Islamic microfinance has been introduced in the contemporary Muslim world to support *zakat* and *waqf* in poverty alleviation.

Against the above background, this study discusses how Islamic social finance can be integrated with Islamic fintech to revitalize MSMEs' going concerns through Islamic contracts. To the best of the authors' knowledge, this study becomes the first to propose such a model. The country is the most populated country in Africa and among the ten most populated countries in the world. The lockdown and closure of various economic activities across the globe were the major reasons for the significant decrease in oil prices. The Nigerian government heavily relies on it to finance its budget (Ejiogu et al., 2020; Ozili, 2020). The country nearly finances 90 percent of its budget with sales proceeds from oil (Abdulrasheed, 2021).

Besides, most of the Nigerian government interventions to mitigate the impact of the COVID-19 pandemic, like food assistance (palliatives), loans to households and the moratorium on government intervention loans, provided only short-term relief without any real long-term and sustainable benefits (Ejiogu et al., 2020). Hence, the importance of finding a sustainable way of mitigating the consequences of the COVID-19 pandemic in the country is very profound. Considering the acknowledgment and contributions of MSMEs to economic development, provision of job opportunities and the significant proportion they constitute to the population of businesses, this study intends to provide an Islamic-based model in which Islamic social finance, Islamic fintech and Islamic contracts for the revival of MSMEs in the country.

The remainder of the paper is divided into five sections. Section 2 presents the motivation for selecting the case study of Nigeria. The need to revive the going concern of MSMEs in the era of COVID-19 is presented in section 3. Section 4 shows the contribution of fintech to the survival and growth of MSMEs. Section 5 links Islamic social finance, fintech and Islamic contracts to facilitate the provision of finance to MSMEs. Finally, section 6 shows the ways forward and concluding remarks.

### **Motivation for Selecting the Case Study of Nigeria**

The most notable spillover impact of COVID-19 on the Nigerian economy was a drastic fall in the price of crude oil from nearly US\$60 per barrel to as low as US\$30 per barrel in March 2020 (Ozili, 2020). The price continued to fall to the extent that its market price was close to the production cost in Nigeria. Consequently, the Nigerian budget was revised to a realistic price and the national debts were increased to finance the budget. For instance, the fall in crude oil price because of the COVID-19 pandemic had made the Nigerian government to decrease the budget for 2020 by 39 percent and the deficit of N1.3 trillion (US\$3.7 billion) was planned to be financed with debts (Abdulasheed, 2021). The country has become highly indebted to internal and external debts. As of September 2020, the total public debts contracted by Nigeria increased to N32.2 trillion (\$84.57 billion) (Oyekanmi, 2021).

Moreover, between 2015 and 2020, Nigeria's total debt profile increased by N20.8 trillion to N32.92 trillion, leading the debt servicing to reach N10.26 trillion (Chimerue, 2021). Currently, the government has applied for approval to borrow an additional \$6.1 billion from bilateral and multilateral organizations to finance the budget deficit for 2021 (Majeed, 2021). Hence, this made it difficult for the government to adequately finance any viable program to revitalize the going concern of MSMEs.

Besides, some studies investigated the effects of the COVID-19 pandemic on MSMEs in Nigeria. For example, by administering questionnaires, Aladejebi (2020) evaluated the impact of the COVID-19 pandemic on SMEs and their survival strategies in Lagos state, Nigeria. The study found a significant decrease in income and staff salaries and the inability to pay back loans, rent and salaries as consequences of the COVID-19 pandemic on SMEs. A survey conducted by Falokun (2020), comprising 1,674 MSME owners in Nigeria on the impact of the COVID-19 pandemic on their businesses revealed that the income of at least 93 percent of them has declined because of the government policy that restricted movement and closed most of the businesses in the country. Besides, shifting to the consumption of food, pharmaceutical and other essential services have contributed significantly to the decrease in their income. Also, Nwaimo and Bank-Ola (2021) assessed the impact of the COVID-19 lockdown on the MSMEs in two Nigerian states, Lagos and Osun. The study found the lockdown to have negatively affected enterprises, leading to the loss of investments and jobs. In addition, only a few enterprises were able to diversify their activities.

Moreover, during the COVID-19 pandemic, the Nigerian government initiated various programs to support the poor and the needy and the MSMEs in the country. According to Ejiogu et al. (2020), while some Nigerian government interventions during the COVID-19 pandemic offered short-term solutions to the poor and small businesses, other interventions and gaps in the policy response indicated a potentially significant negative impact on businesses, households and unemployment. The MSMEs sector is the most vulnerable in the Nigerian economy during COVID-19 and unfortunately, the government has failed to provide adequate support (Ukata & Kalagbor, 2020). Consequently, because of the growing population of Muslims in Nigeria, there is a need to integrate Islamic social finance with fintech and Islamic contracts to reduce the effects of the COVID-19 pandemic (Umar & Danlami, 2021).

Briefly, the findings of the above empirical studies signify the emergency need to provide adequate financial support to MSMEs in Nigeria. The Nigerian government is not in good condition to provide

sustainable finance to MSMEs as it is now deeply in debt crisis coupled with other crises, such as Boko Haram, political instability and banditry activities that collectively become a stumbling block to the country's economic growth and development. These issues show that the conduct of this study is expected to provide a long-lasting financial solution to MSMEs during the COVID-19 pandemic and beyond in the country.

### Reviving the Going Concern of MSMEs in the Era of COVID-19

As earlier pointed out, the importance of MSMEs to the entire global economies, whether developed, emerging or developing, is very profound. Specifically, there is a need to revive their going concern for the following reasons:

1. MSMEs account for over 90 percent of economic activities, provide over 50 percent of jobs across the globe and contribute more than 40 percent of GDP in developing economies (Hajjar, 2020).
2. They perform a vital role being engines that primarily drive economic growth and create jobs (Ghazali & Yasuoka, 2018).
3. SMEs are recognized as the engines of growth to many economies in the world as they contribute about 80 percent to their economic activities (Hally, 2016).
4. In the UK, SMEs constituted 99.9 percent of the total firms' population, provided 60 percent of private sector employment and contributed 50 percent to the country's national GDP (Lu, 2018).
5. In Nigeria, MSMEs constituted about 90 percent of manufacturing firms, providing almost 50 percent of industrial jobs and contributing nearly 48 percent to the country's GDP in the last five years (Ukata & Kalagbor, 2020). Besides, A survey carried out by the Nigerian Bureau of Statistics and the Small and Medium Enterprise Agency of Nigeria (NBS/SMEDAN) in 2017 revealed that MSMEs provided 76.5 percent of the total workforce in Nigeria and contributed 49.78 percent to the country's GDP (Nwaimo & Bank-Ola, 2021).

Unfortunately, the MSMEs sector is one of the most suffering economic sectors because of the COVID-19 pandemic (Bella, 2020). Hence, there is a need to revive their going concern. The term "going concern" is popular among accounting practitioners and academics. The International Federation of Accountants (IFAC) (2016) described "going concern" as the continuity of a business entity for the foreseeable future. Going concern is a popular accounting postulate that resembles the concept of "Istis'hab" in Islamic jurisprudence, which means "retaining" or "accompaniment" (Ahmad, 1994). When a company encounters any financial challenges like failure to meet its commitments (liabilities) and suffering losses, the external auditors are expected to evaluate the ability of such a company to remain in existence to protect the interests of all users of financial statements to enable them to make rational decisions (Zureigat et al., 2014).

Moreover, the International Standard on Auditing (ISA) 570 is the auditing standard for assessing a business's going concern. Based on the standard (ISA 570, para. A2, 11-13), the key indicators of the business's inability to remain going concerns are categorized into three: financial, operational and others. Some of them are summarized as follows:

1. Financial
  - a. Net liability or negative working capital.
  - b. Lack of financial support from the suppliers and other creditors.
  - c. Negative cash flows from operating activities of the business.
  - d. Unfavorable basic ratios.
  - e. Reaching the maturity period of a long-term loan with an unrealistic expectation of getting a new one or over-dependence on short-term credit to fund long-term investments.
  - f. Failure to settle liabilities when they fall due.
  - g. Non-conformity to the agreed terms of long-term liabilities.
  - h. Excessive accrual dividends or non-declaration of dividends.
  - i. Inability to secure funds for executing new profitable projects.
2. Operating
  - a. Indication of the management plan to terminate the business.
  - b. Non-replacement of lost management.



- c. Losing a market share, important customers, franchise, license, or major supplier(s).
  - d. Scarcity of employees.
  - e. Scarcity of key materials.
  - f. Appearance of strong competitors.
3. Others
- a. Non-conformity capital, statutory provisions and other regulations.
  - b. Unresolved legal proceedings against the business that might likely make it cease operation.
  - c. Creation or amendment of law and government policies that might negatively influence business continuity.

However, not all the above indicators for assessing the going concern of a business are attributable to MSMEs. As earlier mentioned, the most challenging issue for all MSMEs across the globe is the Lack of adequate finance. Hence, providing sufficient funds to them would likely revitalize their going concern. The Islamic Development Bank (IsDB) commenced all the necessary arrangements to support and empower MSMEs with \$2 billion in member countries (Hajjar, 2020). This fund will be disbursed in strict compliance with the principles of Islamic finance.

### Contributions of Fintech to the Survival and Growth of MSMEs

The activities of fintech could be broadly grouped into five: finance and investment; financial operations and risk management; payments and infrastructure; data security and monetization and customer interface (Ali et al., 2019). Fintech can provide a solution to the long-term financial constraints faced by SMEs (Lu, 2018). Generally, some essential benefits of fintech to SMEs include the adoption of invoice financing for receivables management, supply chain financing to manage inventory and trade finance, and management of payables and equity (Lajis, 2017). Many countries in the world are now giving priority to MSMEs through fintech.

Specifically, adopting fintech in providing Islamic financial services would likely make it more transparent, efficient, innovative and attractive because Islam accepts all inventions that don't contradict the *shari'ah* (Hassan et al., 2020). Besides, Islamic fintech could serve as a powerful instrument that allows micro-entrepreneurs to obtain a macro-level view of the information about their current state of finance, which can enable them to increase their income, retain more customers as well as minimize costs and risks associated with their businesses (Azman et al., 2020). They further added that micro-entrepreneurs are supposed to tap the potential of Islamic fintech through the digitalization of their businesses for expanding and sustaining their operations

Some studies justified the contributions of fintech to SMEs. For example, Abbasi et al., (2021) assessed the relationship between financial technologies (FinTechs) and SME efficiency by drawing a sample of 1,617 SME firms from OECD countries. The study found FinTechs to have a significant positive impact on SME efficiency. Similarly, Sheng (2021) examined the ability of fintech to provide credit to SMEs in China by investigating lending records of banks in Chinese provinces. The study established the effectiveness of fintech in providing credit to SMEs. In the case of Islamic fintech, Azman et al. (2020) explored the impact of adopting Islamic fintech into businesses by Malaysian micro-entrepreneurs through the administration of questionnaires. The study established that crowd funding, mobile money and peer-to-peer lending have contributed significantly to the sustainability of micro-entrepreneurs income. Besides, Hudaefi (2020) found many Islamic P2P fintech lending companies to have been financing SMEs, agricultural activities and performing charity programs for underprivileged people, which are in about three SDGs of the United Nations, such as ending poverty (SDG 1), hunger (SDG 2) and reducing the inequalities (SDG 10).

Currently, Islamic fintech companies have been continuously opened in Muslim and non-Muslim countries in Asia, Europe and beyond, providing crowdfunding, peer-to-peer (P2P) lending and digital wealth management financial services (Hui et al., 2019). The five most growing sectors of Islamic fintech in 2020 were anticipated to be P2P lending and crowdfunding, challenger banking, blockchain and crypto, robot-advisory and PFM (personal financial management), but P2P lending and crowdfunding remained the largest sector (DIEDC, 2018). P2P lending, or social lending, is an instrument that provides an online matching platform for lenders and borrowers, which facilitates

securing funds quicker than traditional financial intermediaries (Ghazali & Yasuoka, 2018). On the other hand, crowdfunding is capital-intensive financing generated via a certain website in small amounts from various investors, which could be a donation-based platform consisting of many investors who donate funds for a project without any expectation of getting any reward from the project owner (Piliyanti, 2019). P2P lending and crowdfunding provide easier, faster, cheaper and affordable means of accessing funds from the public by the borrowers (Lajis, 2017; Hassan et al., 2020). Another key advantage of an online P2P lending platform is that it is free of geographical limitations as it enables the borrowers to get funds from individual investors, institutional investors and government agencies worldwide (Lu, 2018).

Moreover, according to Rumondang (2018), P2P lending can provide solutions to the capital problems faced by SME owners as it allows them to secure capital quickly within a short period with simple terms and conditions. Similarly, it makes it easier for businesses, particularly MSMEs, to obtain cheaper funds for their operations (Umar & Danlami, 2021). According to Ali et al., (2019), the crowdfunding industry grows at least double every year, providing different models, such as rewards, donations, equity, and debt/lending. Application crowdfunding platforms to finance Shari'ah-compliant businesses, particularly SMEs, housing and agricultural activities, have continuously increased (Oseni & Ali, 2019). Furthermore, digital crowdfunding can be linked to informal microfinance businesses that generate small equity contributions for an entrepreneurial activity next to Microsoft or Google venture to participate in potentially the 'next big thing' (Mahomed & Mohamad, 2016).

Also, by requesting support from the community to support Islamic P2P lending and crowdfunding, the financial challenge faced by SMEs could be solved (Hui et al., 2019). According to the Indonesian Joint Funding Fintech Association (AFPI) Kuseryansyah, about 60 percent of P2P lending was given to SMEs (Trimulato et al., 2021). Thus, this study proposes using P2P lending and crowdfunding platforms to support the revitalization of MSMEs in Nigeria using funds generated through social finance. Empirically, the findings of a study by Dwijayanti et al., (2022) indicate that *Shariah* P2PL fintech can play at least four roles in promoting financial inclusion for MSMEs, including facilitating application for finance requirements, delivering digital-based financial services, working with various business groups and working with digital ecosystems. Morgan Stanley also predicted that the marketplace for P2P lending would reach attain \$290 billion by 2020, with an average growth rate of 51 percent per year (Ali et al., 2019). Generally, the volume of Islamic fintech transactions for 2020 was estimated to be \$49 billion within OIC member countries alone, with Saudi Arabia, Iran, UAE, Malaysia and Indonesia accounting for the largest transaction volume (DinarStandard & Elipses, 2021).

Furthermore, the growth of transaction volume of Islamic fintech might not be unconnected with establishing more firms in both Islamic and non-Islamic countries. DIEDC (2018), in its annual Islamic fintech report for the year 2018, identified 93 Islamic fintech startups across the globe, with Indonesia getting 31; USA, 12; UAE, 11; UK, 10; Malaysia, 7; and 22 others from France, Sweden, Italy, Singapore, Iran, Russia, Pakistan, Egypt, Bahrain, India, Lebanon and Switzerland. Based on these findings, at least three issues could be deduced. First, Indonesia has the highest number of Islamic fintech firms. Second, it is exciting and surprising that the USA and the UK, though not Muslim-dominated countries, became second and fourth in terms of the number of Islamic fintech firms. Third, the emergence of Islamic fintech in many other Muslim minority countries, such as France, Sweden, Italy, Russia, and India, reveals the acknowledgment of the expected positive contributions of the industry to economic growth and development in these countries. More recently, the Global Islamic fintech report 2021 reveals disruptive intuition on the growth of the Islamic fintech landscape, whereby 241 firms were identified across the globe (DinarStandard & Elipses, 2021). In specific, some firms that offer such products and services in some Muslim and non-Muslim countries are as follows:

[...] Another Islamic fintech is Kapital boost which employs murabaha and mudarabah contracts to provide financing for SMEs in Indonesia, Singapore and Malaysia. Others in the IFT include Narwi (Qatar – Waqf crowdfunding), Blossom (USA, Indonesia – equity micro-finance crowdfunding), Easi-up (France, Luxembourg – community-building crowdfunding), Funding Lab (Scotland, Palestine – reward-based crowdfunding), Launch Good (USA – crowdfunding for creative and entrepreneurial endeavors), Skola Fund (Malaysia – crowdfunding for underprivileged undergraduates) and Ata-plus (Malaysia – equity crowdfunding platform) (Lajis, 2017, p. 44).

Besides, the application of technology in the Islamic financial industry has provided access to mobile financial services, which is justified by an increase in the number of customers who use it, more especially micro-entrepreneurs who integrated it into their business models tap into the opportunity that boosts their income (Azman et al., 2020).

### Islamic Social Finance, Fintech and Islamic Contracts

Islamic social finance instruments, such as *zakat*, *waqf*, Islamic microfinance, *sadaqat*, *qard al-hasan*, *sukuk*, etc., could be used and customized based on the diversified needs of customers at different phases of COVID-19 to mitigate its impact (Hassan et al., 2020). If judiciously applied, Islamic social finance can help the beneficiaries become successful entrepreneurs and one day lift others out of poverty (World Bank, 2020). The major objective of Islamic social finance is to satisfy the needs of the poor and the needy to eradicate poverty that continuously increases in Islamic society (IRTI, 2015). Islamic social finance has many instruments capable of alleviating poverty, but the most common ones are *zakat*, *waqf* and Islamic microfinance.

One thing that pointed out the strong expectation from Islamic social finance instruments to alleviate poverty caused by the pandemic was the special attention from both practitioners and academics during the total lockdown period through webinars and other social media. Many prominent Islamic scholars and organizations conducted webinar lectures and training on the potential of *waqf* to eradicate poverty during the COVID-19 pandemic and several calls were made by reputable journals, such as the International Journal of Islamic and Middle Eastern Finance and Management and Jurnal Ekonomi to explore suggestions and views from experts on the use of Islamic finance, particularly social aspects to provide sustainable solutions to the impact of the COVID-19 pandemic (Umar, 2021). Similarly, a book entitled "COVID-19 and Islamic Social Finance" was co-edited by Professor M Kabir Hassan, the winner of the Islamic Development Bank (IsDB) Prize in Islamic banking and finance for 2016, published in 2021 in which various experts in Islamic banking and finance discussed the utilization of Islamic social finance instruments (including fintech) to mitigate the consequences of the pandemic for socio-economic development.

Fintech offers unlimited technological applications in the financial industry that improve our lives (Oseni & Ali, 2019). Khan and Rabbani (2020) believe that financial technology could be integrated with *qard al-hasan* (Benevolent loan) to mitigate the adverse impact of COVID-19 on SMEs. The potential role of Islamic fintech in maximizing Islamic social funds is summarized as follows:

Another key area of opportunity is the role of Islamic fintech in galvanizing the multibillion-dollar Islamic social finance pool from *zakat*, *sadaqat*, and *waqf*. *Zakat* can potentially contribute USD 200 billion to USD 1 trillion globally towards poverty alleviation, according to UNDP in 2018 (World Bank, 2020, p.9).

Today various technological innovations are being applied to revitalize Islamic social finance instruments for the socio-economic development of ummah in various Islamic countries. For instance, the digital *zakat* campaign performed by the National Board of Zakat, Republic of Indonesia (BAZNAS RI) has positively contributed to *zakat* collection despite the recession caused by the COVID-19 pandemic (Hudaefi & Beik, 2021). The fact is that technology makes it easier to capture donors and beneficiaries into the Islamic finance network. For example:

1. The National Zakat Board of Indonesia (BAZNAS) initiated an application called "Sobatku" to allow *zakat* to be collected and paid for via a smartphone;
2. A marketplace Bukalapak created an integrated gateway called "Bukalapak" in order to pay *zakat*, *waqf* and other endowment and;
3. Various *zakat* management agencies have collaborated with fintech companies specializing in payments to design systems for collections and payments. For example, Dompot Dhuafa, BAZNAS and Lazismu have signed agreements with OVO, DANA and GoPay fintech companies in Indonesia, respectively (World Bank, 2020).

From the above, it is understandable how far Indonesia has utilized fintech to maximize *zakat* collections. Fintech can provide an integrated solution to the whole *zakat* value chain comprising the collection, disbursement and intermediation of funds to enhance beneficiaries' selection (World Bank,

2020). Accordingly, this needs to be adapted in other Islamic countries like Nigeria to boost zakat collections and ensure the fund is paid directly to the right beneficiaries and at the right time.

Moreover, Syed et al., (2020) have proposed adopting integrated Artificial Intelligence (AI) and Natural Language Processing (NLP) based Islamic FinTech Model integrating zakat and qard al-hasan to mitigate the consequences of the COVID-19 pandemic on SMEs and individuals. They further presented three basic modules to use in implementing the zakat- qard al-hasan model on a web-based platform by applying AI and NLP as follows:

1. The first module is used for generating and processing information provided by the beneficiaries. The AI and NLP will assist in obtaining essential information that will greatly help zakat- qard al-hasan representatives validate the request.
2. The second mode will assist in generating the potential list of beneficiaries for the lender. Both AI and NLP will assist in verifying and recommending the eligible beneficiaries and;
3. The third module keeps the records of transactions and provides communication functionality (Syed et al., 2020; pp. 30-361).

Briefly, the authors believed that AI and NLP would make the model very effective and transparent. However, the model needs to be expanded to accommodate other instruments, such as *waqf*, Islamic microfinance and *sadaqah*.

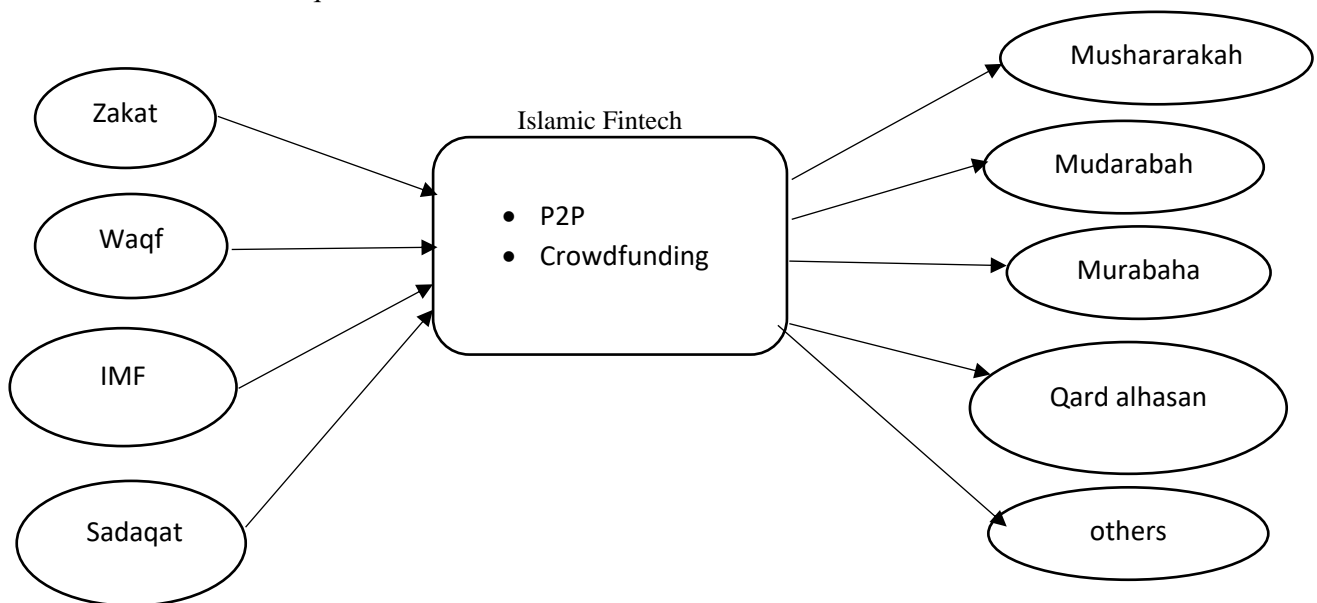


Figure 1. An Integrated Model of Islamic Social Finance, Fintech and Islamic Contracts

Note: IMF stand for Islamic microfinance.

Figure 1 presents the model to adopt in supporting MSMEs in Nigeria. Islamic fintech will be used to generate funds from various Islamic social finance instruments. It should also be used to disburse the funds to the beneficiary MSMEs by using P2P lending and crowdfunding online platforms. The model also shows different contracts to enter with the beneficiaries, such as musharakah, mudarah, murabaha, qard al-hasan, etc. Moreover, the various ways by which P2P lending and crowdfunding platforms could be integrated with various Islamic contracts are as follows:

1. Crowdfunding platforms can accommodate Islamic contracts, such as murabahah, mudarah, ijarah, musharakah mutanaqisah and salam (forward financing transaction) to circumvent any elements of *ribā* (interest) (Hui et al., 2019).
2. Sa'ad et al. (2019) proposed a musharakah peer-to-peer investment model to enable the fund owner to become a partner in the business.
3. Various Islamic contracts, such as musharakah, murabahah, wakalah bi-l ujah, al-ba'i, ijarah and qard al-hasan could be implemented through P2P lending platforms (Bella, 2020).



Briefly, MSMEs prefer to use Islamic-based contracts over their conventional counterparts. This is because, in most Islamic contracts, risks and benefits are shared while the risks are transferred to MSMEs in the case of conventional counterparts. Generally, the principle of Islamic finance permits profit and loss sharing (PLS) contracts in order to protect the interest of all the parties (the holder of the capital and the user of the capital) by assuming their responsibilities in both cases of success and risk (Franzoni & Allali, 2018). Hence, Islamic finance is widely practiced in both Muslim and non-Muslim countries due to its stability during the financial crisis and its ethical principles (Biancone & Radwan, 2014).

### The Ways Forward and Concluding Remarks

The declaration of COVID-19, a pandemic, necessitated governments to take various measures to curtail its spread through restrictions of movements, social distancing and closure of many businesses across the globe. The most affected economic sector around the world is the MSMEs sector. Most such enterprises collapsed because of these measures taken to minimize the spread of the COVID-19 pandemic. Given the acknowledgment of their contributions to economic growth and employment and the provision of job opportunities, finding a sustainable way of reviving their continuity becomes an issue of concern across the globe. Nigeria is one of the most affected nations by the COVID-19 pandemic in terms of economic problems, particularly the debt crisis, because of the enormous debts it continues to secure to finance its budget. Ejiogu et al., (2020) observed that the continuous borrowing by the Nigerian government for economic and social interventions to mitigate the consequences of COVID-19 has significantly squeezed the country's fiscal space.

One of the measures taken to mitigate the consequences of the pandemic was the monthly transfer of ₦5000 as a stipend to some selected Nigerians. According to Ejiogu et al., (2020), the conditional transfer scheme of ₦5000 (\$13) monthly to one million beneficiaries seemed to be ineffective in mitigating the impact of the COVID-19 pandemic because it is far less than the international poverty line according to the UN ((\$1.9 per day). Besides, this scheme has not only accommodated not up to one (1) percent of eligible beneficiaries but is not sustainable. Hence, this study proposed the integration of Islamic social finance instruments with Islamic fintech to provide sustainable financial support to MSMEs in Nigeria through various Islamic contracts, such as *musharakah*, *mudarabah*, *murabaha*, *ijarah*, *qard al-hasan*, etc. The study recommended two platforms, P2P and crowdfunding, through which the funds could be obtained and disbursed to various eligible beneficiaries. Presently, many countries dominated by non-Muslims, such as the US and the UK, have many Islamic fintech companies providing crowdfunding, P2P lending and digital wealth management (Azman et al., 2020). A key impediment to Islamic social finance is the collection and distribution of the Islamic social finance funds because they are prone to fraud and misappropriation; hence the payment of charitable donations or government aid directly into the account of beneficiaries or the use of mobile payment with support of blockchain technology will be a better alternative (World Bank, 2020). This implies that using blockchain in collecting and disbursing social funds could minimize the incidence of committing various fraudulent activities.

However, to develop an effective and efficient Islamic fintech industry in Nigeria, at least five measures must be taken. First, there is a need to implement the recommendations provided by various studies on the strategies for reviving the institutions of Islamic social finance instruments for poverty alleviation in Nigeria (IRTI, 2015; Farouk et al., 2017; Alaro & Alalubosa, 2019; Ahmad, 2019; Mustafa et al., 2020; Umar et al., 2022; Umar et al., 2021). Second, there is a need to provide a regulatory regime that guides the Islamic fintech industry in the country by the relevant agencies while ensuring security as well as the provision of necessary infrastructure in the form of a regulatory sandbox to attain the application of new technologies (Munshi & Sabree, 2016). For example, Malaysia pioneered regulating Islamic fintech in the world in 2016 whereby the Bank Negara Malaysia collaborated with the Security Commission and provided specific guidelines and requirements about *Shari'ah* compliance and guided participants of the proposed sandbox (Ghazali & Yasuoka, 2018; Hui et al., 2019; Sa'ad et al., 2019). Also, the Malaysian Securities Commission initiated a program called the "Alliance of FinTech Community or 'affINity@SC' to provide regulations for the hitch-free operation of fintech in the country (Mahomed & Mohamad, 2016). Hence, in collaboration with the Nigerian Securities and Exchange Commission, the Central Bank of Nigeria should provide favorable

regulations for the registrations and operations of Islamic fintech in the country, particularly by adapting from other countries that have already progressed, like Malaysia. Third, considering how the Islamic banking industry is growing in Nigeria, there is a need to collaborate between the country's existing Islamic banks and Islamic fintech companies. For example, the Islamic finance industry in GCC countries has increased digital banking applications. Bahrain is leading by partnering with Bahrain Islamic Bank and Bahrain Fintech Bay to establish the first shariah-compliant digital bank (Ali et al., 2019). Fourth, Islamic social finance institutions, like Zakat and Hubs Commissions and other similar institutions that discharge similar functions, should collaborate with fintech companies to design systems or applications that make it easier, faster and more convenient to collect funds from donors as obtainable in Indonesia. Fifth, an independent body should be established to supervise the activities of Islamic fintech to ensure that their activities conform to the *Shari'ah*. In Indonesia, the operations of the Islamic Fintech Association, a body responsible for supervising *Shari'ah*-compliant fintech companies' activities, have contributed significantly to the success of Islamic fintech in the country (Trimulato et al., 2021).

Despite the study's contribution by proposing an Islamic-based model to apply in the revival of the going concern of MSMEs in Nigeria during COVID-19, it is conceptual. Hence, future studies should empirically explore the feasibility of the proposed integrated model. There is also a need to suggest more technological applications to minimize corrupt practices to ensure that only eligible beneficiaries are selected and given an approved sufficient amount. This is because corruption is a notable factor hindering the country's development.

## References

- Abbasi, K., Alam, A., Du, M. A., & Huynh, T. L. D. (2021). FinTech, SME efficiency and national culture: evidence from OECD countries. *Technological Forecasting and Social Change*, 163, 1-9. <https://doi.org/10.1016/j.techfore.2020.120454>
- Abdulrasheed, A. (2021). COVID-19 pandemic and the Nigerian economy: The impacts and the way forward. *AIPGG Journal of Humanities and Peace Studies*, 2(1), 53-82.
- Ahmad, M. (2019). An empirical study of the challenges facing zakat and waqf institutions in Northern Nigeria. *ISRA International Journal of Islamic Finance*, 11(2), 338-356. <https://doi.org/10.1108/IJIF-04-2018-0044>
- Aladejebi, O. (2020). Managing small businesses in Nigeria during covid-19 crisis: Impact and survival strategies. *IOSR Journal of Business and Management*, 22(8), 24-34.
- Alaro, A. A., & Alalubosa, A. H. (2019). Potential of shari'ah compliant microfinance in alleviating poverty in Nigeria: A lesson from Bangladesh. *International Journal of Islamic and Middle Eastern Finance and Management*, 12(1), 115-129 <https://doi.org/10.1108/IMEFM-01-2017-0021>
- Ali, H. Abdullah, R., & Zaini, M. Z. (2019). Fintech and its potential impact on Islamic banking and finance industry: A case study of Brunei Darussalam and Malaysia. *International Journal of Islamic Economics and Finance (IJIEF)*, 1(2), 73-108. <https://doi.org/10.18196/ijief.2116>
- Ali, H., Zain, M. Z., Hashmi, H. S., Abbas, M. H., Shahid, M. W., & Tariq, U. (2018). Awareness and knowledge of fintech among Islamic banking and finance students in Pakistan. *Islamic Banking and Finance Review*, 5, 02-22.
- Azman, N. H. N., Zabri, M. Z. M., Masron, T. A., & Malim, N. A. K. (2020). The utilisation of Islamic fintech (I-fintech) in promoting sustainable inclusive growth: Evidence from micro-entrepreneurs in Malaysia. *Journal of Islamic Monetary Economics and Finance*, 6(3), 555-576.
- Bella, F.I. (2020). Optimization of Islamic peer-to-peer lending for micro and small enterprises (MSEs) after pandemic of COVID-19. *Journal of Islamic Economic Laws*, 3(2), 108-123.
- Biancone, P. P., & Radwan, M. (2014). Sharia compliant "possibility for Italian SMEs. *European Journal of Islamic Finance*, 1, 1-9. <http://www.ojs.unito.it/index.php/EJIF>
- Chimerue, C. (2021). *Debt rises by N20.8tn under Buhari, servicing gulps N10.26tn*. Journalist. Retrieved from <https://journalist101.com/2021/05/27/debt-rises-by-n20-8tn-under-buhari-servicing-gulps-n10-26tn>
- DinarStandard, & Elipses (2019). *Global Islamic fintech report December 2019*. Retrieved from <https://ceif.iba.edu.pk/pdf/IslamicFinTechReport19.pdf>

- DinarStandard, & Elipses (2021). *Global Islamic fintech report December 2021*. Retrieved from <https://cdn.salaamgateway.com/special-coverage/islamic-fintech-2021>
- Dubai Islamic Economy Development Centre (DIEDC). (2018). *Islamic fintech report 2018*. Retrieved from <https://www.dinarstandard.com/wp-content/uploads/2018/12/Islamic-Fintech-Report-2018.pdf>
- Dwijayanti, N., Iqbal, M., & Zulfikar, M. (2022). The role of Islamic fintech P2PL in Increasing Inclusion and Financial Literacy of MSMEs. *Journal of Islamic Finance*, 11(1), 94-101.
- Ejiogu, A., Okechukwu, O., & Ejiogu, C. (2020). Nigerian budgetary response to the COVID-19 pandemic and its shrinking fiscal space: Financial sustainability, employment, social inequality and business implications. *Journal of Public Budgeting, Accounting & Financial Management*, 32(5), 919-928. <https://doi.org/10.1108/JPBAFM-07-2020-0101>
- Falokun, L. (2020). *Impact of Covid-19 on micro, small and medium-sized enterprises in Nigeria*. SMETOOLKIT. Retrieved from <https://smetoolkit.ng/articles/17096-impact-of-covid-19-on-micro-small-and-medium-sized-enterprises-in-nigeria>
- Farouk, A.U., Idris, K.B.M., & Saad, R.A.B. (2017). The challenges of zakat management: A case of Kano state, Nigeria. *Asian Journal of Multidisciplinary Studies*, 5(7), 142-147.
- Franzoni, S., & Allali, A. A. (2018). Principles of Islamic finance and principles of corporate social responsibility: what convergence?. *Sustainability*, 10(3), 2-11. <https://doi.org/10.3390/su10030637>
- Ghazali, N. H., & Yasuoka, T. (2018). Awareness and perception analysis of small medium enterprise and startup towards fintech instruments-crowdfunding and peer-to-peer lending in Malaysia. *International Journal of Finance and Banking Research*, 4(1), 13-24.
- Syed, M. H., Khan, S., Rabbani, M. R., & Thalassinis, Y. E. (2020). An artificial intelligence and NLP based Islamic fintech model combining zakat and qardh-al-hasan for countering the adverse impact of COVID 19 on SMEs and individuals. *International Journal of Economics and Business Administration*, III (2), 351-364. <https://doi.org/10.35808/ijeba/466>
- Hajjar, B. (2020). *President of the Islamic Development Bank Group: COVID-19 and micro, small and medium enterprises, saving the global economy from the pandemic*. Retrieved from <https://www.isdb.org/fr/node/44432>
- Hally, L. (2016). Fintech solutions for small businesses. S. Chishti, & J. Barberis (eds.), *The finTech book: The financial technology handbook for investors, entrepreneurs and visionaries* (pp. 123-124). Wiley Online. <https://doi.org/10.1002/9781119218906>
- Hasan, R., Hassan, M. K., & Aliyu, S. (2020). Fintech, blockchain and Islamic finance: Literature review and research agenda. *IJIEF: International Journal of Islamic Economics and Finance*, 3(1), 75-94. <https://doi.org/10.18196/ijief.2122>
- Hassan, M. K., Rabbani, M. R., & Ali, M. A. M. (2020). Challenges for the Islamic finance and banking in post COVID era and the role of fintech. *Journal of Economic Cooperation & Development*, 41(3), 93-116.
- Hudaefi, F. A. (2020). How does Islamic fintech promote the SDGs? Qualitative evidence from Indonesia. *Qualitative Research in Financial Markets*, 12(4), 353-366. <https://doi.org/10.1108/QRFM-05-2019-0058>
- Hudaefi, F. A., & Beik, I. S. (2021). Digital zakāh campaign in time of COVID-19 pandemic in Indonesia: A netnographic study. *Journal of Islamic Marketing*, 12(3), 498-517. <https://doi.org/10.1108/JIMA-09-2020-0299>
- Hui, H. W., Manaf, A. W. A., & Shakri, A. K., (2019). Fintech and the transformation of the Islamic finance regulatory framework in Malaysia. In U.A. Oseni, Hassan M. K. Hassan & R. Hassan R. (eds.), *Emerging issues in Islamic finance law and practice in Malaysia* (pp. 211-222). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-78973-545-120191018>
- International Federation of Accountants (IFAC). (2016). *International standard on auditing 570 (Revised) going concern*. Retrieved from [https://www.ifac.org/system/files/publications/files/ISA-570-\(Revised\).pdf](https://www.ifac.org/system/files/publications/files/ISA-570-(Revised).pdf)
- International Labor Organization (ILO). (2020). *COVID-19 and the world of work: Impact and policy responses*. ILO Monitor 1st Edition. Retrieved from [ilo.org/global/topics/coronavirus](https://ilo.org/global/topics/coronavirus)
- Islamic Research and Training Institute (IRTI). (2015). *Islamic social finance report*. Retrieved from <https://irti.org/product/islamic-social-finance-report-1436h-2015>

- Islamic Research and Training Institute (IRTI). (2020). *Islamic social finance report*. Retrieved from <https://irti.org/product/islamic-social-finance-report-2020>
- Jackson, J. K., Weiss, M. A., Schwarzenberg A. B., & Nelson R. M. (2020). *Global economic effects of COVID-19*. Congressional Research Service (R46270). Retrieved from <https://crsreports.congress.gov>
- Jamil, N. N., & Seman, J. A. (2019). The impact of fintech on the sustainability of Islamic accounting and finance education in Malaysia. *Journal of Islamic, Social, Economics and Development*, 4 (17), 74-88.
- Kebede, S. N., & Abera, N. (2014). Determinants of micro and small enterprises access to finance. *Developing countries studies*, 4(21), 90-104.
- Khan, S., & Rabbani, M. (2020). *Financing Corona virus (COVID-19) affected SMEs through Islamic finance tool qardh al-hasan: An artificial intelligence and NLP based Islamic fintech model*. Retrieved from [https://www.researchgate.net/publication/340491799\\_Financing\\_Corona\\_Virus\\_COVID-19](https://www.researchgate.net/publication/340491799_Financing_Corona_Virus_COVID-19)
- Lajis, S. M. (2017). Risk-sharing securities: Accelerating finance for SMEs. *Islamic Economic Studies*, 25(2), 35-55. <https://doi.org/10.12816/0038221>
- Lu, L. (2018). Promoting SME finance in the context of the fintech revolution: A case study of the UK's practice and regulation. *Banking and Finance Law Review*, 317-343.
- Mahomed, Z., & Mohamad, S. (2016). Disruptors financial innovation and riding the fintech wave. Retrieved from <https://www.inceif.org/wp-content/themes/inceif/images/ISF/Bulletin-Vol.2-article-2.pdf>
- Majeed, B. (2021). *Updated: Buhari seeks NASS approval to take another \$6.1 billion loan*. Premium Times. Retrieved from <https://www.premiumtimesng.com/news/headlines/462319-updated-buhari-seeks-nass-approval-to-take-another-6-1-billion-loan.html>
- Munshi, U., & Sabree, A. (2016). Fintech set to become a game changer for Islamic wealth management. Retrieved from <https://www.gulf-times.com/story/480265/Fintech-set-to-become-game-changer-for-Islamic-finance>
- Mustafa, D., Baita, A. J., & Adhama, H. D. (2020). Quantitative economic evaluation of zakah-poverty nexus in Kano State, Nigeria. *International Journal of Islamic Economics and Finance*, 3(1), 21-50.
- Nwaimo, E. K., & Bank-Ola, R. F. (2021). COVID-19 pandemic and economic crisis in Nigeria: The experience of selected micro, small and medium-sized enterprises in Lagos and Osun states. *International Journal of Management, Social Sciences, Peace and Conflict Studies*, 4(1).
- Oseni, U. A., & Ali, S. N. (2019). Fintech in Islamic finance: An introduction. In U.A. Oseni, & S.N. Ali (eds.), *Fintech in Islamic finance: Theory and practice*. London: Routledge. <https://doi.org/10.4324/9781351025584>
- Oyekanmi, S. (2021). *Nigeria's total public debt rises to N32.2 trillion (\$84.57 billion) as at September 2020*. Nairametrics. Retrieved from <https://nairametrics.com/2021/01/14/nigerias-total-public-debt-rises-to-n32-2-trillion-84-57-billion-as-at-september-2020/>
- Ozili, P. K. (2020). COVID-19 pandemic and economic crisis: The Nigerian experience and structural causes. *Journal of Economic and Administrative Sciences*, 37(4), 401-418 <https://doi.org/10.1108/JEAS-05-2020-0074>
- Piliyanti, I. (2019). Fintech achieving sustainable development: The side perspective of crowdfunding platform. *Shirkah: Journal of Economics and Business*, 3(2), 223- 241.
- Rumondang, A., (2018). *The utilization of fintech (P2P Lending) as SME's capital solution in Indonesia: Perspective in Islamic economics (qirad)*. Proceedings of International Conference of Moslem Society, 2, (pp. 12-22). <https://doi.org/10.24090/icms.2018.1818>
- Ryu, H. S. (2018). What makes users willing or hesitant to use fintech? The moderating effect of user type. *Industrial Management & Data Systems*, 118(3), 541-569. <https://doi.org/10.1108/IMDS-07-2017-0325>
- Sa'ad, A. A., Ahmad, K., & Saleh, A. O. H. (2019). P2P Islamic fintech investment innovation. A proposal of *musharakah* smart contract model for SMES financing and social development. *Al-Shajarah*, 169-184.
- Sheng, T. (2021). The effect of fintech on banks' credit provision to SMEs: Evidence from China. *Finance Research Letters*, 39. <https://doi.org/10.1016/j.frl.2020.101558>



- Trimulato, T., Samsul, S., & Sartika, M. (2021). Investment in *sharia* fintech to develop real sector of SMEs. *Proceedings of Annual Conference of Ihtifaz: Islamic Economics, Finance, and Banking*, 343-366.
- Ukata, P. F., & Kalagbor, P. I., (2020). Impact of COVID-19 pandemic on micro, small and medium businesses in Nigeria: What are the ways of minimizing the impact? *World Journal of Entrepreneurial Development Studies*, 5(2), 21-44.
- Umar, U. H., & Danlami, M. R. (2021). The need for revitalization of Islamic social finance instruments in the Covid-19 period in Nigeria: The role of digitalization. In: Musleh Al-Sartawi A.M.A. (eds), *Artificial intelligence for sustainable finance and sustainable technology*. ICGER 2021. Lecture Notes in Networks and Systems, vol. 423 (pp. 177-187). Springer. [https://doi.org/10.1007/978-3-030-93464-4\\_18](https://doi.org/10.1007/978-3-030-93464-4_18)
- Umar, U. H. (2021). Adapting the al rajhi waqf model to mitigate the impact of Covid-19 on the *ummah*: A lesson to muslim philanthropists. In M. K. Hassan, A. Muneeza, and A. M. Sarea (eds), *COVID-19 and Islamic Social Finance* (pp. 137-151). Routledge.
- Umar, U. H., & Abubakar, M. (2021). Maximizing *zakat* revenues in the COVID-19 period. *International Journal of Zakat*, 6(2), 63-74.
- Umar, U. H., Abubakar, M., & Sharifai, I. I. (2021). Why does business *zakat* contribute insignificantly to achieving "SDG-1: Ending poverty" in Nigeria? Evidence from Recordkeeping Practices. In M.M. Billah (ed.), *Islamic Wealth and the SDGs: Global Strategies for Socio-economic Impact* (pp. 219-239). Springer International Publishing. [https://doi.org/10.1007/978-3-030-65313-2\\_11](https://doi.org/10.1007/978-3-030-65313-2_11)
- Umar, U. H., Baita, A. J., Haron, M. H. B., & Kabiru, S. H. (2022). The potential of Islamic social finance to alleviate poverty in the era of COVID-19: The moderating effect of ethical orientation. *International Journal of Islamic and Middle Eastern Finance and Management*, 15 (2), 255-270. <https://doi.org/10.1108/IMEFM-07-2020-0371>
- Wijayanti, D. M., & Yandra, F. P. (2021). Islamic fintech: A solution for financial problem. *Global Review of Islamic Economics and Business*, 9(1), 65-78.
- World Bank (2020). Leveraging Islamic fintech to improve financial inclusion. Retrieved from <https://openknowledge.worldbank.org/handle/10986/34520>
- Zureigat, B. N., Fadzil, F. H., & Syed Ismail, S. S. (2014). The relationship between corporate governance mechanisms and going concern evaluation: Evidence from firms listed on Amman Stock Exchange. *Journal of Public Administration and Governance*, 4(4), 100-110. <https://doi.org/10.5296/jpag.v4i4.6745>