

Mitigating the Impact of COVID-19 through Islamic Financial Engineering: A Case Study of Pakistan

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Abstract & Indexing



Abstract

The outbreak of corona virus disease (COVID-19 pandemic) has affected the Pakistani economy severely. Major victims of the COVID-19 outbreak are micro, small, and medium-sized enterprises (MSMEs). This study aims to assess the impact of COVID-19 pandemic on the businesses of MSMEs and provide policy recommendations to help MSMEs in reducing business losses and survive through the crisis. Financial engineering is a multidisciplinary field involving financial theory, methods of engineering, tools of mathematics and the practice of programming. It has also been defined as the application of technical methods, especially from mathematical finance and computational finance, in the practice of finance. Islamic Financial Engineering (IFE) plays a key role in the customer-driven derivatives business which encompasses quantitative modeling and programming, trading and risk managing derivative products. The aim of the study is to explore whether the Islamic financial engineering contributes or not to resolve the issues of COVID-19 in Pakistan i.e: (a) to identify the important role of Islamic financial engineering toward COVID-19 Issues remedies in Pakistan (b) to identify the important role of IFE to combat COVID-19 issues in Pakistan (c) to explore more financial products to cover up the dent on poor people due to covid- 19 (d) to improve the role of Islamic microfinance institutions with the help of IFE tools to help the people get rid of poverty (e) to analyze policy implications under IFE and recommendation to accelerate in attaining the revival after COVID-19. This study adopts an exploratory methodology that reviews the available literature comprehensively on policy documents, research papers and reports. The study focuses on the above discussed objectives by examining the performance of MSMEs during and after COVID-19 pandemic. A comparison is given to depict the main variables in these periods i.e prior - during and after COVID-19 pandemic till July 2021. Recommendations has been given to the Government and regulators of financial and non-financial sectors to arm them to cope with such plausible issues in future.

Key words:

Islamic Financial Engineering, COVID-19, solutions, MSMEs, Pakistan

Disclaimer:

The information acquisition, its analysis and interpretation, error & omissions in the study are the whole responsibility of the authors and not their institutions/organizations

1.0. Introduction:

This paper analyses the COVID-19 crisis and its management from the perspective of Pakistan Economics. The attention focuses on Islamic financial engineering role according to the principles of Islamic law , economy, and Pakistan business economic cycles. The paper examines the specific case of massive intervention by governments and, especially, central banks in monetary, and Islamic financial Institutions markets to deal with the pandemic trying to mitigate its negative effects.

This review concludes with a proposal to change the mainstream paradigm, thereby proposing a more sustainable and wellbeing economics.

The COVID-19 pandemic in Pakistan is part of the ongoing pandemic of coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The virus was confirmed to have reached Pakistan on 26 February 2020, when two cases were recorded (a student in Karachi who had just returned from Iran and another person in the Islamabad Capital Territory). On 18th March 2020, cases got registered in all four provinces, the two autonomous territories, and Islamabad Capital Territory, and by 17 June, each district in Pakistan had recorded at least one confirmed case of COVID-19.

All data below is accurate as of 8 June 2021 unless stated otherwise.

Despite being the world's 5th-most-populous country, Pakistan only has so far recorded the world's 26th-highest death toll (at approximately 21,376) and 29th - highest number of confirmed cases (at approximately 935,013).

Pakistan so far has experienced three different waves of COVID-19. The nation's first wave of COVID-19 began in late May 2020, peaked in mid-June when new cases were reported on daily basis and likewise death numbers reached high points which mercifully ended in mid-July. The first wave was marked by a low death rate and passed very suddenly as case and death rates began to drop very quickly after reaching the peak. After the first wave, Pakistan's COVID-19 situation subsided daily new death numbers and testing positivity rates in the country stabilized at low levels. Cases and deaths began rising again, though in early November of 2020 culminating in the country's second wave. This wave was low in its intensity, mainly affected the southern province of Sindh, and peaked in mid-December 2020. The country's third wave began in mid-March 2021 when testing positivity rates, and daily new confirmed cases and deaths began to skyrocket. The third wave mainly affected the provinces of Punjab and Khyber Pakhtunkhwa. This wave peaked in late April 2021, and since then, positivity rates, daily new case numbers, and daily new death numbers have been falling.

Pakistan's most populated province, Punjab, has so far seen the highest raw number of confirmed cases (334,000) and deaths (9,770). Sindh, the second-most populated province in the country has seen the second-highest number of confirmed cases (308,000) and deaths (4,910), but was hit hardest by Pakistan's first two waves of the virus, and still has higher proportions of confirmed cases than all of Pakistan's other provinces. It also has the second-highest death rate, after Khyber Pakhtunkhwa, which is Pakistan's third-most-populated province. While Khyber Pakhtunkhwa has the third-highest number of confirmed cases of COVID-19 (129,000), it has faced an exceptionally high fatality rate of 3.03% which has caused it to have the highest death rate out of any province and the third-highest number of deaths (3,920). In the southwest of the country, the sparse and arid province of Balochistan has seen the lowest confirmed case count (24,500) and the lowest death count (270) of all of Pakistan's provinces and has also shown the lowest amount of confirmed cases per capita, as well as the lowest amount of deaths per capita. The fatality rate in Balochistan is especially low, currently standing at 1.10%. Islamabad Capital Territory, which is richer than any of Pakistan's provinces, has

confirmed 80,300 cases and has seen 745 deaths so far giving it a higher number of deaths per capita and a higher number of confirmed cases per capita than any Pakistani province.

The country was put under a nation-wide lockdown from April 1 and extended twice until 9th May. Upon its end, the lockdown was eased in phases. After the first wave, the country has battled COVID-19 by using "smart lockdowns" and enforcing SOPs.

The distribution of COVID-19 in Pakistan is heavily concentrated in a few key areas. The city of Karachi (as of 7th May, 2021) has recorded about 189,000 confirmed cases making up about 22% of all cases of COVID-19 in Pakistan. Meanwhile Lahore, the country's second-largest city has recorded (as of 5 September 2020) 170,000 cases of COVID-19 making up about 19% of the country's cases. Islamabad Capital Territory and Peshawar District have recorded about 79,000 and 47,000 confirmed cases respectively as of the latest available data. Karachi, Lahore, Islamabad, and Peshawar account for about 485,000 cases, which make up over 55% of the country's total confirmed cases.

1.1 Background (Purpose) of the Study

The purpose of this study is to review the role of financial engineering in combating the COVID-19 epidemic issues in Pakistan.

The test attempts to get economic activity ready for action while ensuring that general wellbeing efforts won't be futile and that returning to normal life won't chance a second, potentially more lethal wave of infections. Basically, it is tied with finding some kind of harmony - the correct equalization - and it must be done well in its first run-through. Continuing the economic activities in a nation is definitely not a straightforward choice to take in the midst of the coronavirus pandemic, nor is it a simple errand. It is an extreme call that needs to consider the general wellbeing worries as well as similarly significant is the financial soundness of a country . In order to empower the economy and restore the wellbeing and security of residents, Pakistan needs to consider the following:

- Improving the public health system so as to deal with the endemic and the resultant emergency, the government may utilize technological solutions in addition to augmenting financial resources and enhancing the insurance coverage.
- Supporting the corporate segment to limit unfriendly monetary effect and encourage snappy recuperation through quick measures, (for example, credit backing to MSMEs) or medium-to-long measures, (for example, infrastructure building and undertaking arrangements)
- Ensuring salary and business, especially for the more powerless segments of the society Numerous organizations have needed to send laborers home, Organizations ought to be approached to secure employments and pay rates to laborers for the period, Govt should share trouble through actualizing direct money transfer programs upheld by satisfactory checking and assessment systems, and utilizing existing digital payments infrastructure.
- Promoting public sector Islamic financial institutions should be additionally promoted and pushed by the SBP to loan out low-ticket credits. through working capital to guarantee that liquidity returns into the system. Banking

sector should be pushed to give rate cuts instigated by SBP to the borrowers. Individual tax reductions and tax holidays upto one year can be embraced to restore utilization, which will help in spiking the economic growth.

– Fortifying coordination and correspondence among different arms of the government departments, divisions, states, neighborhood organization, and controllers.

– Making arrangements for possibilities at all levels of government to create alternate courses of action dependent on situations of potential COVID-19 effects. The next step of this study is to evaluate various possible strategies and options that could help in re-engineering the economy and its associated problems. The cases from different countries around the globe need to be considered.

1.2 Overview of Covid-19 Epidemic:

Covid-19 epidemic reportedly originated from Wuhan, China in December 2019 i.e. Extreme Acute Respiratory Syndrome Corona Virus 2 (SARS-CoV-2). World Health Organization (WHO) declared on January 30, 2020 the outbreak as an emergency and pandemic for public health. COVID-19's clinical symptoms are respiratory disorder, fatigue, dry cough, tiredness, etc. while 80 percent of patients healed without any care. Elderly men, children, men who already have cardiovascular disease, obesity, and diabetes are vulnerable to COVID-19. COVID-19's clinical symptoms are respiratory disorder, fatigue, dry cough, tiredness, etc. while 80 percent of patients heal without any care. Elderly men, children, men who already have cardiovascular disease, obesity, and diabetes are vulnerable to COVID-19.

The best way to prevent and slow down transmission is maintaining social distance. We have to protect our self and others from infection by washing our hands or using sanitizers and avoid touching face..

The COVID-19 test kits available in hospitals are not at all sufficient for the increasing number of cases. Hence, it is required to implement an automatic detection system to prevent COVID-19 spread among people. The AI has sub domains like Machine Learning, Deep Learning. It has several application in the area of Natural Language Processing and Computer Vision applications. Deep learning and ML Techniques are useful in tracking COVID cases, predicting, generating dashboards, Diagnosis and treatments, generation of alerts to maintain social distance and for other possible control mechanism.

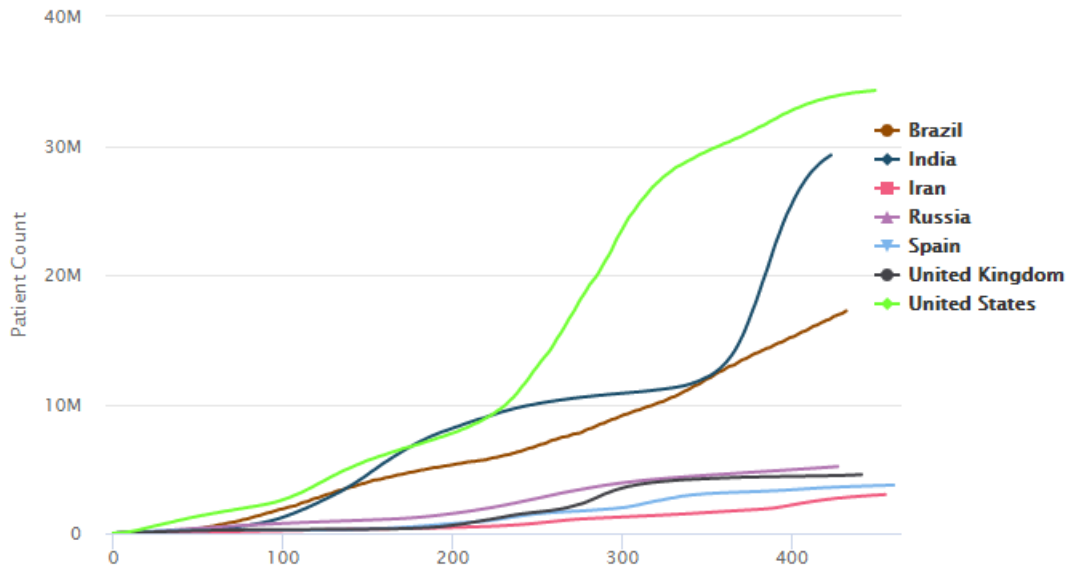
1.2.1 Covid-19 Epidemic Issues:

Outbreak of COVID-19 has disturbed the entire world affecting the health care system and economics of the world.

1.2.1.1 Covid-19 Epidemic Issues (Global):

Global position of cases by number of days since 10,000/- cases

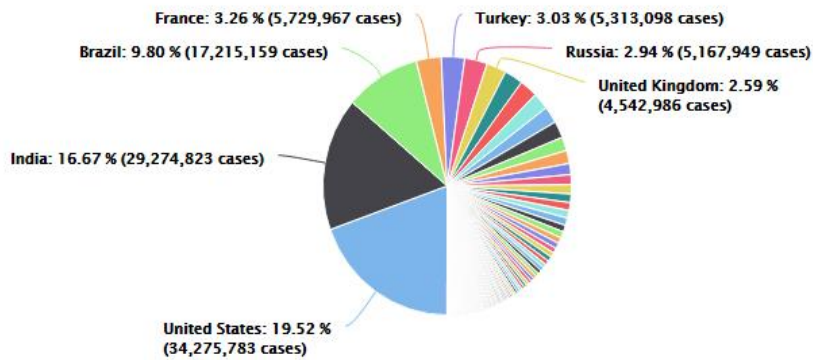
Cumulative number of cases, by number of days since 10,000 cases



Source: Worldometer - www.worldometers.info

Countries cases distribution

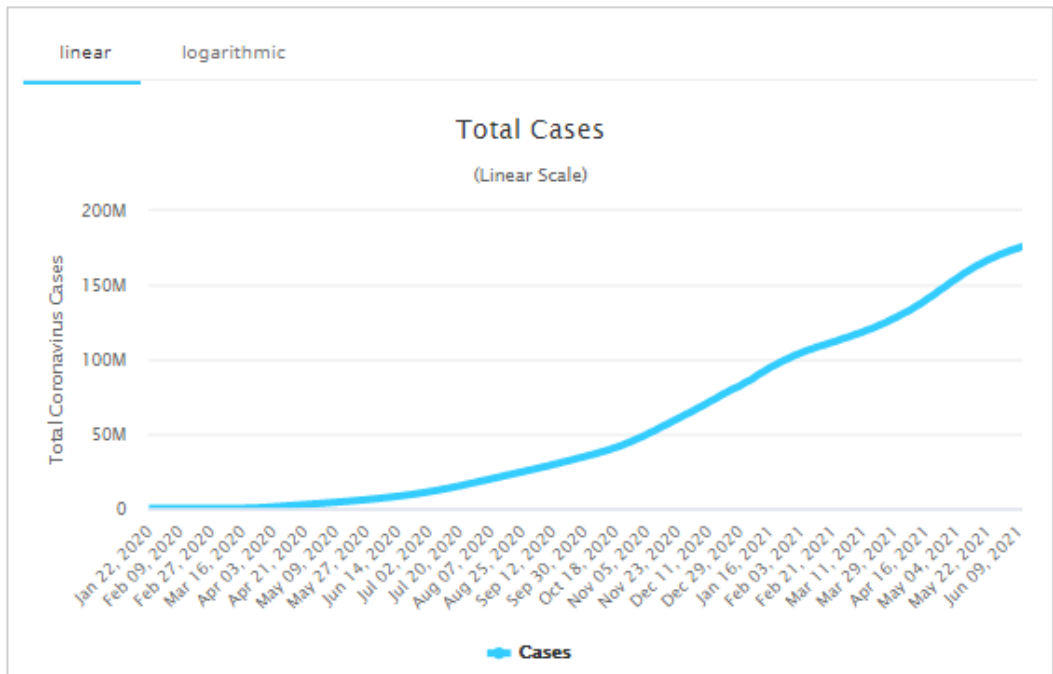
Distribution of cases



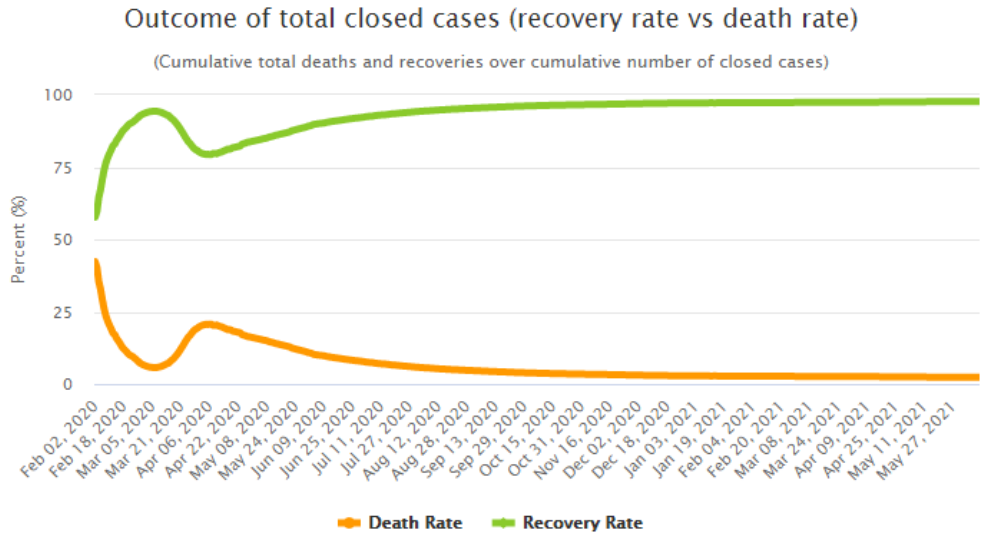
Source: Worldometer - www.worldometers.info

Total Cases (worldwide)

"Total Cases" = total cumulative count (175,625,507). This figure includes deaths and recovered or discharged patients (cases with an outcome).

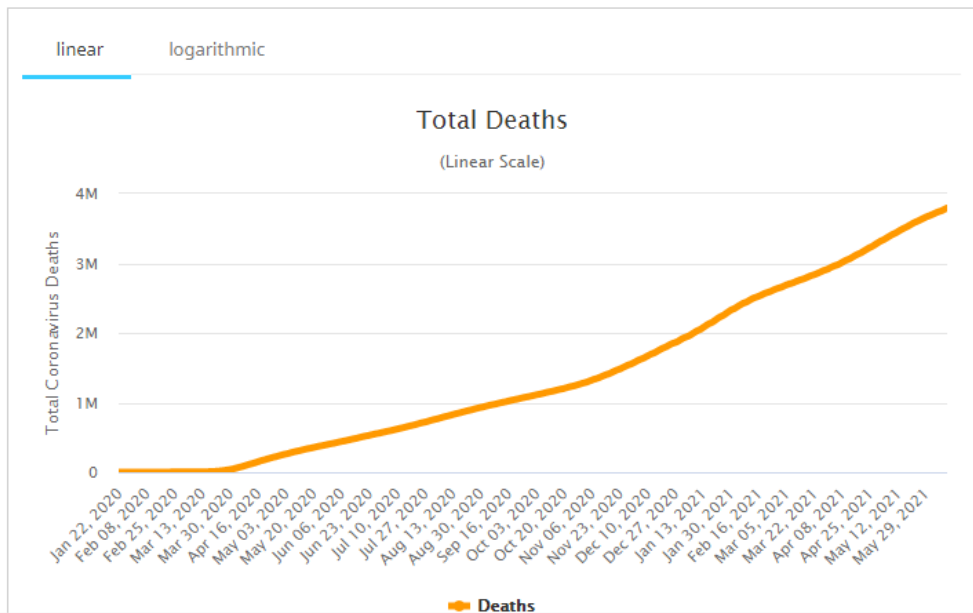


Outcome of Cases (Recovery or Death)



Source: [Worldometer - www.worldometers.info](http://Worldometer-www.worldometers.info)

Total Deaths



1.2.1.2 COVID-19 EPIDEMIC ISSUES IN PAKISTAN

Pakistan's already fragile economy had only just been moving towards stability when the health crisis struck. Experts fear that the pandemic's economic fallout will considerably derail the country's recovery process.

Pakistan has so far registered nearly 950,000 cases of the coronavirus and over 22,000 related deaths. A week ago, President Arif Alvi congratulated the nation for its "victory" against COVID-19 during an interview. Alvi said the government has successfully saved the country's poorest from the financial impact of the pandemic. At the time of Alvi's commendation, the confirmed number of COVID-19 patients in Pakistan stood at 950,000. The government of Pakistan says the drop in the daily number of new coronavirus cases in July is due to its "smart lockdown" strategy. But observers say the trend could be a result of misreporting and inadequate testing.

The pandemic has also taken a devastating blow upon the Pakistani economy. "Pakistan's economy is shrinking, unemployment is rising and various sectors are in crisis," warned Zafar Moti, the former director of the Karachi Stock Exchange (KSE). Moti told DW he was less concerned about Pakistan's financial markets and more concerned about the long-term impact of the pandemic. "All of this will negatively impact foreign reserves and ultimately the currency value. In the long run, financial markets will also be negatively affected," he said. When Khan took power in 2018, Pakistan's GDP growth was around 5.8%; now it is 0.98% and is likely to decline further. The country's fiscal deficit is almost 10% and revenues have plummeted in the past two years.

GOVERNMENT CASH-RELIEF PROGRAMS

Pakistan's public health system was overstretched long before the onset of the coronavirus pandemic. On average, Pakistan has one doctor for every 963 people and one hospital bed for every 1,608 people according to the UNDP figures. Pakistan faces a shortage of 200,000 doctors and 1.4 million nurses to cope with the crisis.

In early 2019 in the face of a monetary crisis Pakistan reached out to the International Monetary Fund (IMF) for a bailout package worth six billion dollars. The economy was only just recovering from the crisis when the pandemic struck.

Due to the pandemic, an additional 2.45 million people now suffer from food insecurity. One third of Pakistan's population live below the poverty line while 66% of the population — or 145 million people — living in poverty, requires immediate relief. The government has launched the Ehsaas Emergency Cash financial relief program on April 1st in an attempt to help the most vulnerable part of the population in the wake of the pandemic.

A total of 144 billion rupees (\$0.86 billion, €0.74 billion) was handed out to some 12 million families with each family receiving 12,000 rupees per month.

But for business journalist Hamza Farooq Habib, the short-term solution is not sustainable. He thinks the government has been downplaying the crisis

right from the beginning and doubts the president's claims of giving relief to the poor.

The National Institute of Health (NIH) has recently conducted a survey which shows that the number of affected people in the capital city of Islamabad stood close to 300,000, although according to official statistics, more than 1.5 million people are infected," he said.

Woeful Economic Indicators

Investment banker and risk analyst Khurram Schehzad expects Pakistan's economy to shrink by \$15 billion as a result of the pandemic. He also predicts a 10% decline in gross domestic product (GDP) in the fourth quarter of the financial year 2020. "Complete or semi-lockdowns can result in no real GDP growth for or over 2% negative growth in FY-20, spreading over to the first quarter of the next fiscal," Schehzad told . A recent survey by Islamabad-based research organization Gallup found that Pakistan's unemployment rate is predicted to surge to a whopping 28%. The number of unemployed people in the country is estimated to reach 6.65 million during the fiscal year 2020-21, compared to 5.80 million in the outgoing financial year.

A 30% layoff in the formal sector is also projected due to a prolonged lockdown, resulting in a 189 billion rupees impact on the private sector, Schehzad explained.

In June, the Pakistani federal government unveiled an economic recovery plan worth 1.2 trillion rupees. Provincial governments are also in the process of preparing their own financial packages. In addition, Islamabad has announced support funds for businesses which include 100 billion rupees in tax refunds and an additional 100 billion rupees in deferred interest payments.

The State Bank of Pakistan has cut interest rates for its borrowers by 225 basis points in mid-June, easing pressures from the federal government and businesses owing to cash flow problems. Considering Pakistan's limited financial capacity to bear the costs of the pandemic, experts warn that the country may in future require assistance from not only the IMF and the World Bank but also from strategic allies like China and Saudi Arabia.

COVID-19 position upto 09 June 2021 of covid cases is as under

Pakistan statistics

* Last updated: 09 Jun, 2021 - 07:10am Islamabad/Pakistan



Province wise data as on 09 June 2021

Province wise Cases

325,110 SINDH	134,928 KPK	343,031 PUNJAB	81,871 ISLAMABAD	25,961 BALOCHISTAN	19,566 / 5,664 AJK/GB
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DEATH AND RECOVERIES AS ON 09 JUNE 2021

	Confirmed Cases	Active Cases	Deaths	Recoveries
AJK	19,566	626	558	18,382
Balochistan	25,961	1,119	291	24,551
GB	5,664	109	107	5,448
Islamabad	81,871	2,767	766	78,338
KPK	134,928	3,998	4,170	126,760
Punjab	343,031	12,669	10,397	319,965
Sindh	325,110	23,699	5,164	296,247

1.2.1.3- IMPACT OF COVID-19 ON THE GLOBAL ECONOMY

The impact of the disease on society and economy can be witnessed from the lockdown of cities all over the world, labor mobility restrictions, travel bans, airline suspensions, and most importantly slowdown of the economy. COVID-19 crisis went global from February 21 to March 24, 2020 and still the number of cases is growing rapidly every day. It is predicted that the COVID-19 outbreak will have major ramifications for global GDP growth. Due to the global outbreak of COVID-19, the global GDP is likely to be affected between 2.3% to 4.8%. Additionally, it has also been predicted that the current pandemic outbreak may cause global foreign direct investment to have shrunk by 5% – 15%. Further, according to the UNCTAD report, the world needs a support package of up to \$2.5 trillion to cope with the damage. Hence, based on these statistics, the current global crisis will likely be worse than the 2008 crisis. Further, according to International Labor Organization (ILO), almost 25 million people around the globe could lose their jobs (loss of workers' income of as much as USD 3.4 trillion). A more recent report of ILO shows that lockdowns (full or partial) measures are influencing 81% (around 2.7 billion workers) of the total global workers. "It is the worst global crisis since the Second World War". Estimates suggest the U.S. would lose three million jobs by midsummer in 2020, the trend in Europe and other parts of the world will be similar (Siddiqui, 2020). According to ILO the impact of COVID-19 on the economic output of accommodation and food services, real estate, wholesale and retail trade, repair of motor vehicles and motorcycles is 'high', while utilities, public administration and defense, social work activities, human health, and education is 'low'.

COVID-19 will have a more profound effect in developing countries that will make it much more difficult for them to implement effective stimulus

minus the binding foreign exchange constraints. The most vulnerable countries are those that have weaker health infrastructure, or countries heavily dependent on trade and tourism sectors, heavily indebted, and those that depend on unstable capital flows. Controlling the COVID-19 outbreak will revive the economy, but the risk of continued financial stress is very high even after 2020 . Further, it has also been estimated that poverty is likely to increase by around 11 million people . Although the economic impact of the outbreak is continuing and is increasingly unpredictable, it is clear that the situation in developing economies will get worse before it gets better. In addition, World Bank in its recent report has predicted that South Asia could face its worst economic performance in 40 years with half of the countries falling into a deep recession. This is the case, particularly for Pakistan.

1.2.1.4 IMPACT OF COVID-19 ON PAKISTANI ECONOMY

It has been reported that Pakistan has lost one-third of its revenue and exports dropped by 50% due to COVID-19 outbreak and lockdown (Junaidi, 2020). Economists warn of recession amid virus lockdowns in Pakistan (Naqvi, 2020). Similarly, the World Bank also warns that Pakistan might fall into a recession . Due to the ongoing crisis caused by the COVID-19 pandemic, Pakistan's real GDP growth in FY20 is expected to contract by 1.3% as the national and global economic activity slows down abruptly during the last few months of the fiscal year (World Bank, 2020b). Further, in case the outbreak of COVID-19 deteriorates and continues longer than expected, Pakistan's real GDP growth for FY20 may contract by 2.2% just before recovering to 0.3% growth in FY21 (WB, 2020b). The biggest and most immediate impact of the lockdown is the halt in business operations. Lockdown was first announced in Sindh province from March 23, 2020. Karachi—the capital city of Sindh province—is considered as the country's largest industrial zone accounted for 30% of total exports. Due to lockdown, out of 2700 factories in Karachi less than 50 were operating on the first working day (Hussain, 2020). Further, Hussain (2020) reported that there are around 05 million people in Pakistan who live just at or below the subsistence line, while there are the masses of largely unskilled or low-skilled people (such as labors, waste recyclers, construction workers, transport workers, and domestic workers) who work in different industries, services, and agriculture, and rely on daily wages to meet their needs. According to the author, around 04 million people are working on a daily wage basis in Karachi alone, besides it is estimated that around 04 million individuals are also working in Punjab province. These daily wagers have been hardest hit by the lockdowns. Next there is a class of micro-enterprises (also known as self employed persons) such as small shop owners, household businesses, and street vendors, among others who heavily rely on their micro business. These businesses are usually operated by family members in different industries ranging from agriculture to education. Further, these micro-enterprises are considered a part of the informal economy,⁵ and most of their activity is undocumented. According to the recently available statistics, the micro-enterprises or self-employed persons are accounted for 35.7%

(2017–18) of the total national employment (Sohail, 2019, p. 7). Furthermore, 55.6% (2017–18) of these businesses are vulnerable, out of which, more than 87% of employment in agriculture, three-fourths of jobs in wholesale and retail trade, 50% of employment in restaurants, three-fifths of the job in real estate and business, and more than two-fifths of employment in transport and communication is vulnerable (Sohail, 2019, pp. 10–12). For further details about sector wise vulnerability of micro-enterprises (self-employed persons), see Fig. 2. From the above statistics, one can quickly get an idea about the severity of the impact that the COVID-19 outbreak had on micro-enterprises.

Thereafter come the small and medium-sized enterprises. Many small and medium-sized enterprises are also facing huge issues. For instance, the textile and apparel industry has been affected mainly due to the imposition of lockdown. 54% of Pakistan's manufacturing sector exports are beverages, food, tobacco sub-sectors and textile, a reduction in export demand for these sectors will have a disproportionate impact on Pakistan (World Bank, 2020b). In the same way, the agriculture sector is no exception. For instance, wheat crop harvest usually begins in Sindh and the Southern Punjab provinces in late March until mid of June. Due to the non-availability of labor and transport, this sector also faced several issues. Similarly, in the case of the transport industry, many drivers of local transportation, including bus, taxi, and rickshaw have been sent home. The closure of businesses and disruption of national supply chains have a significant impact on the retail and wholesale, transport, warehousing, and communications services (World Bank, 2020b).

Further, Pakistan's currency has devalued which poses another threat for the businesses. According to a recent report of the World Bank, Pakistan's exchange rate has remained relatively stable in the fiscal year-2020 from June to February has been devalued by 7.3% in March (World Bank, 2020b). According to the Pakistan Labor Force Survey (2017–18), the unemployment rate in the country is 5.8% (Sohail, 2018). However, due to the ongoing crisis and lockdown, the unemployment rate is expected to reach 8.1% during the fiscal year 2020–21 (Siddiqui, 2020). The above discussion indicates that Pakistan will suffer disproportionately. The impact of coronavirus on the global and Pakistani economy will leave deep scars. Therefore, it is extremely important to empirically assess the impact of COVID-19 outbreak on MSMEs to assist policymakers and practitioners to streamline their strategies to help these businesses survive from the ongoing crisis.

1.3 ISLAMIC FINANCIAL ENGINEERING

The recent decades have witnessed financial innovation and novel contracts. First of all, the so-called “conventional banking system” has emerged increasing the need to adapt the challenges from the demand side. Secondly, within the so called “Islamic finance industry,” the incentive to innovate around the prohibited and the disadvantaged transactions has been unfortunately high. According to IMF 2010, the public debt of Italy and Greece has exceeded the annual GDP, while others (like Portugal, Ireland, and

Belgium) are following with over 90% of GDP. Comparing the 2008 financial crisis of Iceland with the 2010 crisis of Greece, some important differences appear: Iceland has its own currency, which has helped to soften the consequences but Greece is currently trapped within the EUR monetary union. On the Banque de France conference, March 4, 2011, Kenneth Rogoff of Harvard University commented: "Western policymakers and economists often portray Islamic financial systems, with their emphasis on shared risk and responsibility in lending, as less efficient than western systems that put no strictures on debt. Yet one can equally argue that Western financial intermediation is far too skewed towards debt, and as a consequence generate many unnecessary risks."

In the Muslim world, conventional agreed interest loans are commonly objected for the fact that they avoid a sharing participation in the default risk related to the purpose of the loan. For the same reason, transfer of risk by selling it to another party is often objected. In fact, avoidance of gharar is a fundamental request according to Islamic discourse, e.g., numerous hadiths forbidding gharar sales. Having accepted this, it is becoming clear that, modern tools of risk management and hedging should be applied appropriately using all the knowledge we currently have in order to reduce risk exposures. Quantitative evaluation of risks involved therefore is a necessary precondition in order to enable the counterparties to first obtain transparency about the existing risks and, on the basis of this information, to reach a fair agreement about the mutual distribution of risks.

2.0 STATEMENT OF THE PROBLEM

This article aims to highlight the financial issues in Pakistan.

Pakistan is also facing economic problem and has shrink it lack of "Standard operating Procedure" healthcare professionals suggest that the government must act responsibly to ensure better security provided to healthcare professionals.

2.1 Scope of the Study:

This Study covers the covid-19, its impact and the solutions though Islamic financial system.

2.2. Objective of the Study:

This study aims to explore whether the Islamic financial engineering can contribute to resolve the issues after COVID-19 issues in Pakistan i.e:

- (a) to identify the important role of Islamic financial engineering towards COVID-19 Issues in Pakistan
- (b) to identify the important role of Islamic financial engineering to combat from present and post COVID-19 Issues in Pakistan
- (c) to explore more financial products to cover up the dent on poor people due to covid- 19
- (d) to improve the role of Islamic microfinance institutions with the help of IFE tools to check out the people from poverty
- (e) to put policy implication under IFE and recommendation to accelerate in attaining the revival after COVID-19.

2.3. Research Questions:

1. What is the impact of covid-19 globally?
2. What is Impact of COVID-19 on Pakistan?
3. How the COVID-19 issues can be resolved through IFE
4. How Islamic Banks can help to revive affects of COVID-19 onthe economy?

3. Research Methodology:

We shall use publicly available data to examine the current state of the COVID-19 epidemic and preparedness in Pakistan. We shall review the documents on the websites of the Ministry of National Health Regulation, Services and Coordination (Covid-19 dashboard) and the National Institute of Health (NIH) daily situation report. We adopted an exploratory methodology with extensively reviewing the available literature, including policy documents, research papers, and reports in the relevant field. Further, to add empirical evidence, we collected data from micro, small, and medium-sized enterprises (MSMEs) operating in Pakistan.

This study is based on COVID-19 situational reports, lacking any methodological analysis, which limits its scope. Moreover, due to limited number of relevant studies in Pakistan, the data is mostly taken from websites of local and national newspapers which further narrows down its scope. In this regard we shall gather the data from local and international Institutions

Many researchers also adopted a similar approach and found it useful as well as time and cost-saving (Duarte Alonso et al., 2018; Kühne et al., 2010). To increase the response rate, it has been decided to utilize the personal and professional network of researchers. We reached out to potential enterprises through a variety of social media platforms such as WhatsApp, Facebook, and LinkedIn, including e-mails, and invited them to participate in the online survey. Complete confidentiality was assured to all the respondents so that a large number of enterprises can participate in the survey. The questionnaire has 17 questions. The survey includes several questions regarding basic information about enterprises and their characteristics (such as size and industry), impact of COVID-19 outbreak on business, decline in sales and profit, survival period, business normalization period, and appeal to the government to ease the burden. Participation in the survey was voluntary and no financial compensation was offered on completion of the survey. Before formally launching the survey, the questionnaire items were pretested among a small sample of business owners to evaluate the clarity and relevance of the questionnaire items to identify and eliminate any potential issues.

The data collected through a snowball sampling technique as it is widely used due to its cost-effectiveness and time-saving benefits (Bo Liu et al., 2014). We collected data during the period from April 09, 2020, to April 21, 2020, through a snowball sampling technique. A total number of 184 MSMEs from different cities of Pakistan participated in the survey and provided their perspective. A descriptive analysis approach is employed for data- analysis.

A vast majority of participants belong to Sindh Province (46.20%) followed by Punjab (13.05%), KPK (Khyber Pakhtunkhwa) (9.78%), ICT (Islamabad Capital Territory) (9.24%), Gilgit-Baltistan (8.15%), Azad Jammu and Kashmir (7.07%) and Balochistan (6.52%). Around 90% of the respondents are either the owners of MSMEs or working on managerial positions. In terms of annual sales turnover, over 90% of the participating enterprises have below 150 million PKR annual sales turnover. Further, in terms of employment size, the survey results indicate that over 32% of enterprises employ less than 10 employees, while more than 43% have up to 50 employees, whereas around 12% of the participating enterprises reported that they employ up to 100 employees. This ratio shows that majority of the participating enterprises are MSMEs. Further, over 38% of the enterprises do not employ any daily wager, while over 33% of firms have less than 10 daily wages employees. Additionally, more than 13% of firms have up to 20 daily wagers. In addition, over 8% of participating enterprises reported that they employ up to 29 daily wagers. Hence, a large number of employees would have been affected due to the COVID-19 outbreak. The detail of the sample is presented in Table 1. Further, in terms of industry distribution, the majority of the sectors represented in the study are: retail and wholesale (27.72%), agriculture, forestry and fishing (10.87%), restaurant and hotel (9.78%), and consumer goods manufacturing (9.78%) (see Fig. 3).

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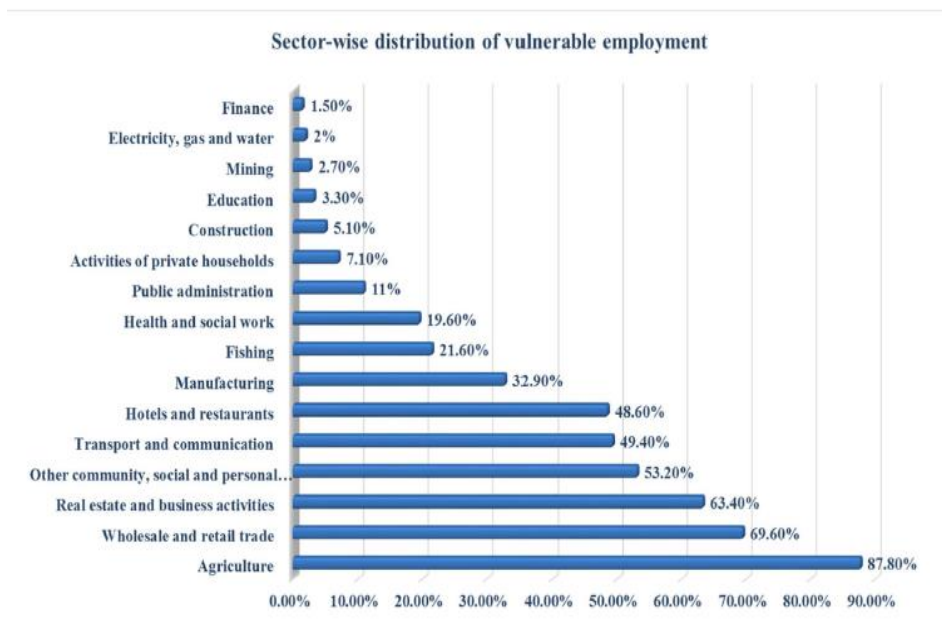


Fig. 2. Sector-wise distribution of vulnerable employment in micro-enterprises (self-employed persons).
Source: Created by authors based on the Pakistan Employment Trends report (Sohail, 2019).

4.0 Analysis and Results

The Government of Pakistan should have to adopt the multidimensional approach to remove the dent on Pakistan's economy and on Pakistani people.

Moti does not expect demand to pick up again post pandemic. "All of this will negatively impact foreign reserves and ultimately the currency value. In the long run, financial markets will also be negatively affected," he said.

When Khan took power in 2018, Pakistan's GDP growth was around 5.8%; now it is 0.98% and is likely to decline further. The country's fiscal deficit is almost 10% and revenues have plummeted in the past two years.

a. Khan's Cash Relief Program:

Pakistan's public health system was overstretched long before the onset of the coronavirus pandemic. On average, Pakistan has one doctor for every 963 people and one hospital bed for every 1,608 people, according to UNDP figures. Pakistan faces a shortage of 200,000 doctors and 1.4 million nurses to cope with the crisis. In early 2019, in the face of a monetary crisis, Pakistan reached out to the International Monetary Fund (IMF) for a bailout package worth six billion dollars. The economy was only just recovering from the crisis when the pandemic struck.

Due to the pandemic, an additional 2.45 million people now suffer from food insecurity. One third of Pakistan's population live below the poverty line while 66% of the population — or 145 million people — living in poverty, requires immediate relief.

Prime Minister Khan launched the Ehsaas Emergency Cash financial relief program on April 1 in an attempt to help the most vulnerable part of the population in the wake of the pandemic.

A total of 144 billion rupees (\$0.86 billion, €0.74 billion) was handed out to some 12 million families with each family receiving 12,000 rupees per month.

But for business journalist Hamza Farooq Habib, the short-term solution is not sustainable. He thinks the government has been downplaying the crisis right from the beginning and doubts the president's claims of giving relief to the poor.

"We still don't know the real number of the [coronavirus] cases," Habib told DW.

"The National Institute of Health (NIH) recently conducted a survey which shows that the number of affected people in the capital city of Islamabad stood close to 300,000, although according to official statistics, just over 14,000 people are infected," he said.

Woeful Economic Indicators

Investment banker and risk analyst Khurram Schehzad expects Pakistan's economy to shrink by \$15 billion as a result of the pandemic. He also predicts a 10% decline in gross domestic product (GDP) in the fourth quarter of the financial year 2020.

"Complete or semi-lockdowns can result in no real GDP growth for or over 2% negative growth in FY-2020 spreading over to the first quarter of the next fiscal year," Shehzad told DW.

A recent survey by Islamabad-based research organization Gallup found that Pakistan's unemployment rate is predicted to surge to a whopping 28%. The number of unemployed people in the country is estimated to reach 6.65 million during the fiscal year 2020-21, compared to 5.80 million in the outgoing financial year.

A 30% layoff in the formal sector is also projected due to a prolonged lockdown, resulting in a 189 billion rupee impact on the private sector, Shehzad explained.

a. International Aid:

In June, the Pakistani federal government unveiled an economic recovery plan worth 1.2 trillion rupees. Provincial governments are also in the process of preparing their own financial packages.

In addition, Islamabad announced support funds for businesses which include 100 billion rupees in tax refunds and an additional 100 billion rupees in deferred interest payments.

The State Bank of Pakistan cut interest rates for its borrowers by 225 points in mid-June, easing pressures from the federal government and businesses facing cash flow problems.

Considering Pakistan's limited financial capacity to bear the costs of the pandemic, experts warn that the country may in future require assistance from not only the IMF and the World Bank but also from strategic allies like China and Saudi Arabia.

a. General Situation;

The COVID-19 situation in Pakistan is once again getting precarious. Since the last two weeks of December 2020 the daily average death rate is near 125/day and daily confirmed cases have been above 4500. While the national positivity rate is +10%, many large cities show much higher positivity rates (Faisalabad 18%, Mardan 17%, Peshawar 16%, Karachi 14%, Lahore 13%, Multan 10.5% Rawalpindi 9%, Islamabad 9%) Major hospitals in larger cities are approaching full capacity.

Following the recent rise in COVID incidence and death figures due to the 3rd wave, the government has announced re-imposition of the following social restrictions to avoid huge congregations during the End of Ramadan festivities: complete lockdown in all the larger cities from 8 May to 16 May; all commercial markets, amusement parks closed – complete ban on local tourism; all restaurants, community centers, marriage halls closed for indoor services (excl. home delivery, take-away) - 50% work from home policy imposed – All sports, cultural and other social events banned – Schools closed till 23 May – local public transport shut down – Intercity travel shut down.

Inbound international flights to be reduced by 80%. All inbound passengers will undergo a rapid antigen test on arrival. Those testing positive will be moved to government designated quarantine facilities for 10 days. Those testing negative will still have to self-isolate at home.

a. Preventive Measures:

Following the recent rise in COVID incidence and death figures the government has announced imposition of social restrictions from 15 March including:

- Micro Smart Lockdowns in areas showing multiple positive cases imposed in larger cities
- All commercial markets, amusement parks to close by 18:00 pm (excl. essential food, pharmaceutical, medical, mechanical and technical services)
- All restaurants, community centers, marriage halls closed for indoor services (excl. home delivery, take-away)
- Cinemas closed – Face masks obligatory in public places
- 50% work from home policy imposed

- All sports, cultural and other events banned
- Large gatherings limited to less than 50 persons
- Schools closed.

Vaccination: Pakistan has started local formulation of Chinese vaccine CanSino, the first local batch would be available by the end of May 2021. Pakistan has also received the first lot of 1.2 Million Astra Zeneca vaccines under the COVAX facility. As of 5 May 2021, a total of 2,8 Million vaccine doses have been administered in Pakistan. The country's largest vaccination has been inaugurated in the Karachi Expo Center with a capacity of 30,000 vaccinations a day.

a. Exit Strategy:

After initially launched in Islamabad, the government has extended the Ehsas soup-kitchen scheme for the impoverished to three other major cities, Peshawar, Lahore and Faisalabad.

Under the TERF (Temporary Economic Refinance Facility) around 630 business received concessionary loans of PKR 435 Billion for setting up new business and or expanding existing production lines during the period March 2020 to March 2021.

The UAE has rolled over \$2 Billion loan provided to Pakistan as part of the financial bailout package in Aug 2018. The maturity date of the loan had expired in March 2021.

Pakistan and Japan signed a debt suspension agreement worth \$ 367 Million under the Phase 1 of the G20 Debt Service Suspension Initiative.

The World Bank has approved a new loan of \$400 Million for the KPK province for addressing staff and budget issue in the health and education sectors.

a. Economy

The RDA Roshan Digital Accounts received overwhelming positive response from expatriate Pakistanis as it crossed the milestone of \$1 Billion inflow during the 7 months since its launch.

Pakistan's exports rebounded to more than \$2.3 Billion in March 2021, an increase of 14.47% from \$2.07 Billion in Feb 2021. On the other hand, imports were reported at \$5.6 Billion in March 2021 which was an increase of 21.8% over the last month. Trade deficit for March 2021 came in at \$3.24 Billion which was 118% higher than \$1.5 Billion in March 2020.

Engro Corp has announced that it will undertake advanced studies for setting up a manufacturing plant in the petrochemical sector at an estimated cost of US\$ 1 Billion producing 0.55 to 0.75 million tons of propane dehydrogenation-based propylene.

Car sales in the first 9 months of the current FY registered a rise of 37% with sales of 134,522 units compared to 98,425 units in the same period of last FY. On a month-on-month basis car sales rose by 27% in March 2021 compared to Feb 2021.

The housing and construction sector banking finance portfolio has increased by 36% in the first three quarters of the current FY from PKR 148 Billion in June 2020 to PKR 202 Billion in March 2021. Under this program more than 50% of the bank branches have been designated to accept the housing finance applications.

Imports Feb 2021

Product	Imports	Change	Against
Telecom Eqpt 2020	\$237.2 M	+70.94%	\$138.8 M in Feb
Autoparts	PKR 6.3 B	+4.51%	
Synthetic fibre 2021	PKR 8.5 B	+28.11%	PKR 6.6 in Jan
Used clothing 2020	\$24.8 M	+82.12%	\$13.6 M in Feb
Iron steel scrap 2020	\$148.9 M	+13.08%	\$131.7 M in Feb
Motor cars CBU 2020	\$23.4 M	+125.3%	\$10.2 M in Feb
Agricultural Mach Jan 2021	PKR 1.25 B	(-)5%	PKR 1.3 B in
Wood & Cork Feb 2020	\$8.78 M	(-)22.11%	\$11.24 M in
LNG 2020	\$224.5 M	+7.34%	\$209.2 M in Feb

A. Economic Impact:

Overseas remittances hit an 8-month high at \$2.72 Billion in March 2021 an increase of 43% over same period last year. Overseas remittances remain above \$2 Billion for the 10th consecutive year. The inflow was 20% more than the previous months.

LSM Large Scale Manufacturing Sector has posted a growth rate of 9% in the first 9 months of the current FY. Out of the total 15 sectors 8 sectors have posted positive growth (textile, auto, fertilizers, pharma, food, beverages, tobacco, coke, petroleum, chemicals, mineral products) while 7 sectors (iron steel, electronics, leather, paper board, engineering products, rubber, wood) posted declining trends. FDI in various sectors in Pakistan dropped by 40% to \$167.6 Million in March 2021. During the first 9 months of the current FY FDI dropped by 35% to \$1.39 Billion compared to \$2.15 Billion in the same period last year.

C. Economic Outlook:

The IMF has projected economic growth in Pakistan at 1.5% for the current FY and 4% in the next FY. The IMF has also projected an average of 10% inflation rate during the current FY which might slow down to 7.9% in the next FY.

The Asian Development Bank (ADB) has projected a GDP growth rate of 2% for the current FY 2020-21. However, the GDP per capita will remain negative 0.2% in the same period.

On the other hand, the State Bank of Pakistan has projected that the economic growth in Pakistan would grow by 3% in the current FY.

D. Short Term Opportunities:

Flemish companies continue to write to the post in order to prepare the grounds for the opening of the market when the situation in Pakistan normalizes again. Pakistani companies have started contacting this office with new trade leads which are being forwarded to FIT.

We are planning a Belgian Business Contact Day in Multan to be held in collaboration with the Multan Chamber of Commerce & Industry. The proposed date for the event is around end-March or later depending on the COVID-19 situation the country. An agreement has been reached with the MCCI to hold the event as soon as the restrictions on social gatherings are lifted.

E. Long Term Opportunities:

Apart from the healthcare & medical and building & construction sectors, the long-term opportunities for Flemish countries would depend on the offer and expertise of Flanders region which are already well regarded in Pakistan (steel, metals, chemicals, raw materials, industrial machinery and goods, etc.)

STRUCTURE OF ISLAMIC MICROFINANCE CATEGORIZING:

1. Microcredit consists of an interest-free loan and Murabaha, lease, salam;
2. Micro-equity includes Murabaha and Musharaka;
3. And charity indicates. Zakat, sadaka, and waqaf.

5.0 Findings and Discussion:

Problems faced by MSMEs due to COVID-19 or lockdown As expected, the COVID-19 outbreak has a significant impact on MSMEs operating in Pakistan. Over 94.57% of the enterprises under study indicated that their businesses have been affected in some form by the ongoing coronavirus outbreak or due to lockdown, while, 3.26% expressed no impact and 2.17% of enterprises were unsure about the impact. Those enterprises that were either unsure or indicated no effect of COVID-19 outbreak or lockdown on their businesses were excluded from further analysis. After eliminating these responses, the total sample size becomes 174. The results presented in Fig. 4 reveals that most of the participating enterprises have been severely affected due to the COVID-19 outbreak. Notably, over 38% of the participants expressed that they are experiencing a severe impact on their businesses (ranging from 91% to 100%). When asked about the types of issues⁶ these enterprises are facing amid of COVID-19, the top five reported problems were financial (67.93%), supply chain disruption (47.83%), decrease in demand (44.02%), reduction in sales and profit (38.04%, 41.85% respectively) (see Fig. 5). A recent study conducted by Harvard Business School also reported that due to the current outbreak, many small businesses are financially fragile (Bartik et al., 2020). Moreover, reduction in demand is possibly due to loss of customer or buyer flow. These results imply that most of theMSMEs are vulnerable to financial, supply chain disruptions, and demand constraints aside from other issues.

When particularly asked about the expected decline in sales during 2020, three-fourths of the participating enterprises reported that they expect a decrease in sales by over 60%. In terms of profit decline, over two-thirds of enterprises believe that during 2020 their profit will be decreased by more than 60% due to the COVID-19 outbreak (see Fig. 6). Small firms operating in other countries are also facing similar situations. According to a survey conducted by National Small Business Association, 49% of surveyed small businesses are experiencing reduced customer demand, and 33% are experiencing supply chain disruptions, while 20% are experiencing

employee absenteeism (NSBA, 2020). These statistics are not surprising since the gravity of the ongoing issue is even worse than the financial crisis of 2008.

Strategies adopted by MSMEs to tackle the current situation The enterprises have chosen a different variety of strategies to curb the business crisis. Particularly, 31% of enterprises have shut down the business completely, while 19% have partially closed their businesses, whereas 18% of enterprises are planning to apply for a loan. Moreover, 12% of enterprises are continuing to operate their business. Due to the outbreak of COVID-19 in Pakistan, most of the enterprises were instructed to shut down their businesses to contain the spread of the disease. Therefore, many participating enterprises have reported a higher ratio of a business closure. Further, only 4% of participating enterprises expressed that they are planning to change the business line to address the COVID-19 challenge. Additionally, 2%are struggling to work remotely. Working remotely as much as possible is one of the best ways to stay safe and minimize the exposure to get infected. Nevertheless, not all MSMEs have the required resources to adopt such a strategy. In addition, a better and quick way to minimize exposure to the disease is to reduce traveling. The results indicate that 12% of the participants also reported that they have limited traveling (Fig. 7a).

During any economic crisis, most of the businesses face a cash-flow shortage; therefore, we asked the participating enterprises to share their strategies to overcome the cash flow shortage. The results show that 43% of the enterprises choose to lay off employees, and 12%preferred to reduce staff salary. Besides, 13% of the responding enterprises plan to shut down the business partially to reduce the cost and manage the cash flow shortage (see Fig. 7b). Considering the gravity of the outbreak, laying off employees and shutdown of many businesses was already expected. A recent study conducted by Harvard Business School also reveals that many small businesses are temporarily closed and have laid off their employees by 40%relative to January (Bartik et al., 2020). These findings indicate that most of the participating enterprises are struggling to survive by various means.

When asked about any plan or preparedness to handle such a crisis, over 83% of the participants reported that neither they have any plan nor they are well-prepared to handle such a crisis. Only 17% of the enterprises reported that they have a plan to handle the situation. Similarly, a study conducted by the Harvard Global Health Institute regarding the engagement of companies in global health concluded that Fortune 500 companies have minimal engagement in global health as compared to involvement in environmental issues (Horneffer et al., 2020). This highlights that most of the enterprises globally are not well prepared to handle the health crisis caused due to pandemic. There are many examples of natural disasters that have put the national and global economies in recession. Hence, preplanning and preparedness are essential to face future pandemics or other natural disasters. Firms must invest in building a strong crisis

management strategy to handle a similar disaster in the future (Gittell et al., 2006; Prasad et al., 2015).

Survival period and time required to get back to normal business In terms of survival period during the ongoing outbreak, 32% of enterprises reported that they could survive up to 2 weeks, while 19% of enterprises can survive up to 5 weeks, whereas, around 16% of enterprises expressed that they can be maintained up to 8 weeks. In other words, more than two-thirds of participating enterprises can be maintained up to 8 weeks (around 2 months). Only 2% of participating enterprises reported that under the current condition, they could survive up to 06 months (for further details about the survival period of enterprises, see Fig. 8a). Most of the firms under study are likely to survive up to 02 months only. Similarly, a recent survey regarding the impact of COVID-19 on SMEs operating in the U.S conducted by Senz (2020), shows that 65% of small businesses believe that they cannot survive if the ongoing crisis lasts four months. This means that in case of prolonged lockdowns, there are higher chances that many Pakistani MSMEs could not sustain to survive and will go bankrupt or out of business.

When enterprises were asked to estimate (from today when the current outbreak of coronavirus and lockdown are over) the expected time required to get back to regular business, 72% of the enterprises reported that it would take less than 01 month, while 19% of the enterprises expressed that it will take 1–2 months to get back to normal business (see Fig. 8b). As most of the firms under study are micro and small-sized; therefore, once the outbreak and lockdown end, the firms can quickly start their businesses and get back to normal.

Appeal to the government for assistance When asked about the assistance required from the local, provincial and federal government, over 27%of the participating enterprises indicated the need for the provision of loan on the low-interest basis, 24%wants the government to allow them to continue to operate the business, while 23% expressed their interest for the provision of subsidies in utility charges. Besides, over 23% aims to get subsidies on utility charges (Fig. 9).

6.0 Recommendations for Policymakers

Based on the findings of this study, we have suggested different policy measures to help MSMEs ease the sufferings. Particularly, our policy measures have been divided into the following four categories:

- Protection of employees and information accuracy
- Boost economy
- Income and employment support for MSMEs
- Planning and resilience capability.

The protection of employees is very necessary amid of COVID-19 outbreak because the disease is very contagious and deadly. Moreover, in times of heightened tension, information accuracy plays an important role to update the stakeholders about the situation and operation of the business. Due to the outbreak, the Pakistani economy has witnessed an unprecedented slowdown; therefore, the economy must be stimulated by

allowing trade to continue (Steiner&Gurría, 2020) to help small businesses survive from the crisis. Furthermore, as our study reveals that most of the MSMEs have been severely affected in terms of income and employment; therefore, they must focus on restructuring their strategies to reduce the economic burden. Additionally, without the assistance of the government, these businesses cannot survive from the crisis. Hence, the government's

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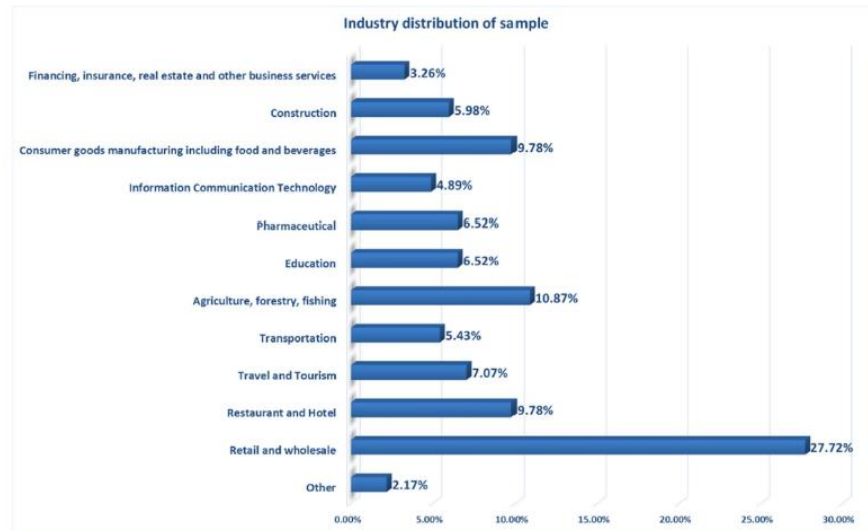


Fig. 3. Industry distribution of the sample.

actions related to supporting MSMEs in terms of income and employment are also necessary. Additionally, building resilience capability and positive social relations are usually regarded as effective strategies for these businesses during disaster times (Gittell et al., 2006; Prasad et al., 2015). Similarly, ILO also suggested that the policy actions must cover the health and safety of workers, economic stimulation, and income and employment the workplace. Similarly, ILO also suggested that besides economic support, health protection measures for workers, employers, and their families are also necessary; ILO also emphasized the need to introduce and strengthen protective measures in the workplace and the community (ILO, 2020a). Occupational safety and health can also be improved through social dialogue between employers, workers, and their representatives (ILO, 2020a).

Thanks to the media and internet to be the primary source of pandemic information before its outbreak. However, now the news is spread through social media in addition to traditional news channels. Most of the fake news is spread through social media, and invariably individuals make a personal evaluation of the situation by themselves. As there is a lot of misinformation revolving around us, and people may not be able to sort out all information and make a reasonable judgment, therefore, one has to confirm the real news through multiple sources of information. Before we see the latest news and start to act, we must carefully consider the source of the information.

Particularly, firms can play an important role to communicate authentic and reliable information with the relevant stakeholders in a timely manner to avoid any ambiguity. Hence, an effective response to the crisis requires appropriate communication and rapid understanding of the current scenario across different levels of the firm. Moreover, it is also necessary to communicate timely information about the business status (open/closed), working hours of operation, and online/delivery-based options for the customers to reduce confusion and facilitating customer support for local businesses. Further, firms must communicate information related to the health and safety of employees and customers. ILO has also emphasized that accurate, timely, and transparent information is necessary not only for the prevention and treatment of this pandemic but also for the reduction of uncertainty and trust in all economic and social areas, including the workplace (ILO, 2020a). Because a drop or lack of confidence will

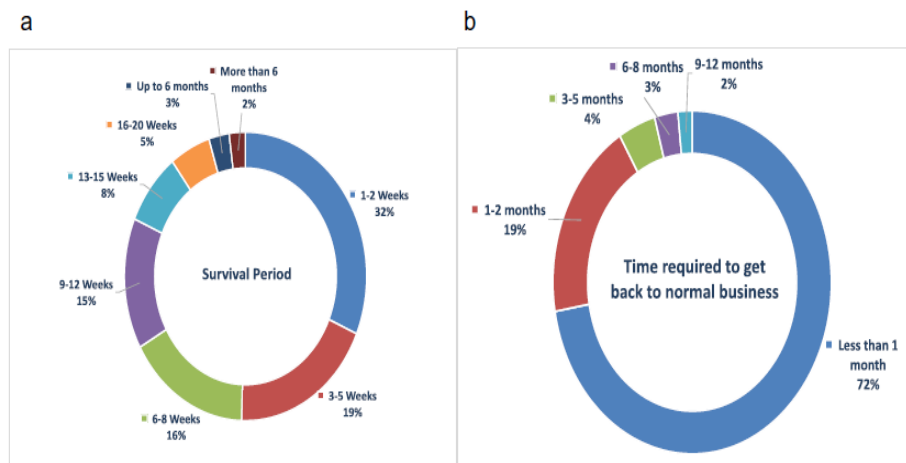


Fig. 8. a. Survival period during COVID-19. b. Time required getting back to normal business outbreak or lockdown.

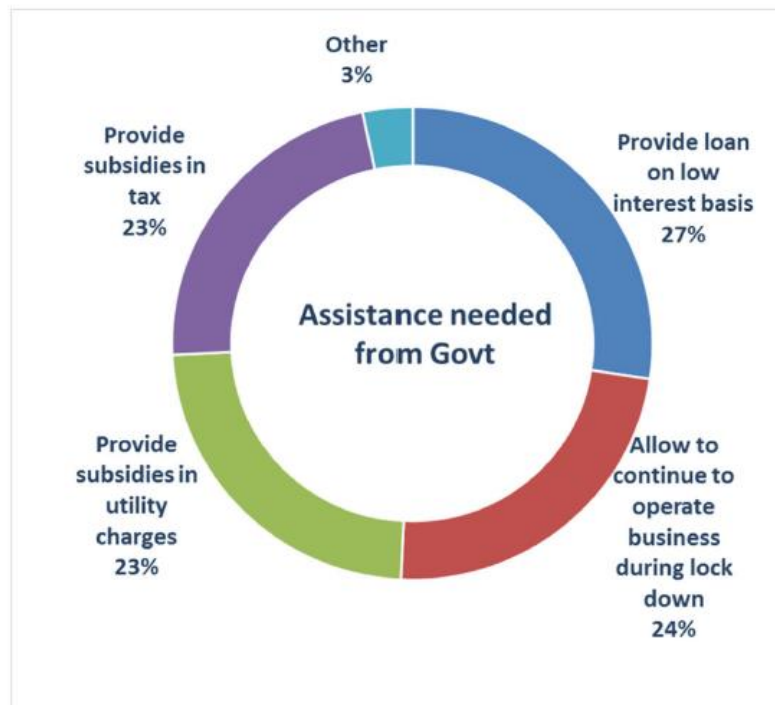


Fig. 9. Assistance needed from local/provincial/federal government.

7.0 Recommendations for Practitioners:

MSMEs represent over 90% of the national enterprises in Pakistan and contribute 40% to the GDP, with over 40% to export earnings (Shah, 2018). This study was conducted to examine the impact of COVID-19 outbreak on MSMEs operating in Pakistan in order to assist policymakers and practitioners in streamlining the strategies to ease the burden of the current crisis on these businesses. Our findings underline several issues faced by MSMEs due to the current pandemic. To the best of our knowledge, this research provides first systematically collected information about the impact of COVID-19 outbreak on MSMEs in Pakistan and is among only a few studies in the field worldwide.

In our survey, we find that due to the COVID-19 outbreak and lockdowns, many MSMEs have been severely affected. Consequently, these businesses are facing a variety of issues such as financial (67.93%), supply chain disruption (47.83%), decrease in demand (44.02%), reduction in sales and profit (38.04%, 41.85% respectively). Moreover, three-fourths of firms expect a decline in sales by more than 60%, while over two-thirds of participating enterprises are expecting a decline in profits by more than 60% during 2020. Furthermore, in order to tackle with the current situation and cover cash flow shortages, many firms are adopting a variety of strategies such as apply for a loan (18%), shut down the business completely and partially to reduce costs (31% and 19% respectively), lay

off employees (43%) and reduce staff salary (12%) among others. In addition, more than two-thirds of participating enterprises reported that they could not survive if the lockdown lasts more than 2 months. Further, 72% of participating enterprises believe that it will take less than 1 month to get back to normal from the date lockdown and outbreak ends. Consequently, MSMEs operating in Pakistan will experience a challenging time at least during 2020.

Further, micro-enterprises or self-employed persons are more vulnerable to such a crisis. Over 50% of these enterprises were already vulnerable (Sohail, 2019, p. 7). Due to the COVID-19 outbreak and restrictions to shut down the business, the micro-enterprises have been extremely affected. In addition, those firms that have very low cash reserves are vulnerable and may not survive during the ongoing outbreak of COVID-19. Therefore, it is extremely necessary to mitigate not only the ongoing crisis but also the long-term effects caused due to COVID-19 or lockdowns.

Based on the findings of the study, different policy recommendations were proposed to ease the burden on MSMEs. These include protection of employees and information accuracy, boosting economy, income and employment support for MSMEs, planning, building resilience capability and positive social relations. The findings and policy suggestions of our research are relevant to policymakers that seek to assist MSMEs and to owners and managers of MSMEs that seek guidance in managing their business during hard times. Our suggested policy measures may not be enough to help MSMEs to survive during the current crisis, but these measures would be very constructive to ease the suffering of these businesses during a difficult time.

Despite the fact, our research provides insightful theoretical and practical implications concerning the impact of COVID-19 on MSMEs, yet some limitations remain in this research that provides room for further research.

The sample size of our study was not enough to represent the respective industries. Hence, future research can consider increasing sample size with respective industry representation. Besides, creating social and economic consequences, the outbreak of COVID-19 has created new challenges for the protection of the health and safety of employees and customers along with new workplace operational culture. Hence, future studies can also consider examining these issues to provide more in-depth knowledge about the consequences of the ongoing pandemic on businesses.

Economy of Pakistan can be revived by adopting the two-pronged strategy.

1) Govt Steps 2) Islamic Financial Institutions. Steps by Govt.

1. Boost economy
2. Allow trade to continue to operate
3. Home delivery/offline services
4. Online banking
5. Income and employment support for MSMEs
6. Financial assistance and other subsidies
7. Unemployment benefits
8. Concession or suspension of commercial property rents
9. Explore new opportunities

10. Telecommuting and flexible working
11. Cooperation with other firms for labor force.
12. Social dialogue between employers and workers
13. Planning and resilience capability
14. Preplanning and learning from experience
15. Build resilience capability
16. Encourage positive employee relationships to enhance resilience during crisis

8.0 OVERALL RECOMMENDATIONS

8.1 Islamic Banks Approach and their Instruments:

The previous studies ensured that the leading causes of microcredit default are the diversion of loan for consumption purpose, meeting up emergencies and high-interest rate which led the loan recipients toward taking more loans at high interest to repay the initial credits. This process makes them bound to sell their assets and retard of getting out of poverty (A. R. ABDUL RAHMAN, 2007; Laila, 2010; Parveen, 2009; A. S. Usman & Tasmin, 2016a). Islamic Micro-finance is a market niche that develops to provide financial mediation with emphasis on ethical and moral values in business as preserved in the Quran and Hadith (teachings of Prophet Muhammad, peace be upon him) (Akhter, Akhtar, & Jaffri, 2009; Bhuiyan, Siwar, Ismail, & Talib, 2011). To cover up the impacts of COVID-19, this study identified two broad approaches to the role of Islamic financial institutions. They are Islamic Bank (Micro, SME) approach and Islamic social enterprise approach.

Group-based microcredit program has formed the Islamic microfinance institutions. Group-based microcredit model is the process of opportunity for peer lending, peer monitoring, homogenous matching, and joint liability with credit risk between the group members (Bhuiyan, Siwar, & Rashid, 2011; Dossey, 2007; Fernandez, 2010; Hassan & Tufte, 2001; Karim, 2008).

The main difference between conventional microcredit and Islamic microcredit is the presence of Riba (interest) which is strictly prohibited in Quran (Davis & Venkatesh, 2004) and Hadith since it embodies exploitations and oppression. Therefore, Islamic Microcredit models are developed according to Sharia ruling for finance. The following are some of the examples of Islamic Microcredit (Ahmed, 2004; Akhter et al., 2009; Khan & Phillips, 2010; Obaidullah & Khan, 2008).

Islamic (SME, Micro Finance) is the small loan offered by the microcredit institutes under Shariah compliance. Islamic principles of management handle the financial products, and ownership structure where dealing with interest is strictly prohibited (Uddin & Barai, 2016). A. S. Usman and Tasmin (2016b), however, showed the structure of Islamic Banking categorizing three modes:

4. Microcredit consists of an interest-free loan and Murabaha, lease, salam;
5. Micro-equity includes Murabaha and Musharaka;
6. And charity indicates. Zakat, sadaka, and waqaf.

8.2 Profit & Loss (PLS) Sharing Financing:

Profit & loss sharing financing based on equity and participation have a strong relationship to the real economics which lead to an equitable distribution of income and wealth and assist in allocating resources efficiently (Hussain, Shahmoradi, & Turk, 2016). Mamun, Uddin, and Islam (2017) identified two forms of PLS financing, i.e., mudaraba and musharaka whereas Dhaoui (2015) added three more products Musuqat (Orchard financing), Muzar'ah (Share of harvest) and direct investment with mudaraba and musharaka in his model.

- Mudaraba: It is such a mode where the financier invests funds in the entrepreneur business with an agreement to share profit or lose among themselves. If the business makes any profit, the profit will be distributed to them by contract. But if it makes any loss, the financier will bear the loss of his capital, and the entrepreneur takes the loss of time and labor.
- Musharaka: In this mode, both the entrepreneur and the financier contribute to the capital as well as managerial efforts by agreed upon amounts and they share profit and losses as agreed.

8.3 Non-Profit & Loss Sharing Financing

The non-PLS sharing finance is used to provide financing fund to the consumer and corporate credit. It includes the instruments Murabaha, ijārah, salam, and istisna (Hussain et al., 2016).

- Murabaha: Murabaha is a trade with markup 'buy-resell' used for purchasing goods and assets on credit. Under this contract, the microfinance program, the financier buys products and resells to the microenterprises for the cost of goods plus a markup of the administrative fee. The borrower will pay for the goods in equal installments until the last payment.
- Ijara: Ijara is a lease-based contract where the leaser sells the right to the lessee of using a physical asset for a specified period. During the contract period, if the lessee fails to pay, the leaser can repossess the asset as he owns the leased asset.
- Salam: Bai-Salam is also a contract of sale in which payment is made in advance by the buyer, and the delivery of the goods is a prolonged time in the future by the seller (Obaidullah & Khan, 2008).
- Istisna: It is both parties in future will bear a spot contract between the user and manufacturer who transfer goods to clients and the obligation. There may have a third party, i.e., bank acting as an intermediary who agrees to receive payment from clients and make progress installments to the manufacturer.

Islamic Social Enterprise Based Financing:

From the viewpoint of lack of available funds, the long-term sustainability of IMF institutions is a problem due to the insufficient diversification of financing modes as most of them are Murabaha-centric. In addition to it, PLS is rarely used, though it is considered as ideal. Zakat, Awqaf and qard al-Hasana based IMF institutions are being considered as potential (R. Abdul Rahman & Dean, 2013).

The concept of Islamic social enterprise inspired from social-business concept (promoted by Nobel Laureate, Muhammad Yunus). As the primary purpose of it is not profit maximization, it has been popular and focused on social justice providing health care, accommodation as well as protecting environmental degradation. The Islamic social enterprises may be formed based on zakah, and qard al-Hasana into three categories, i.e., Awqaf based trustees and zakat based.

- **WAQAF based Financing:** It includes different types of trustees-based institutions such as schools, colleges, universities, hospitals or financial institutions which have a board of trustees regulated by shari'ah rules with permission of the competent authority, e.g., government. The primary source of funds may be receipt of donations from various sources such as rich people of the society, public, private or foreign aids in any kind, e.g., cash, land, building or any other fixed assets. It helps by providing education, medical treatment at the low cost to the more impoverished section of people, vocational training for unemployed youth and interest-free loans and assisting orphan and destitute women.
- **Zakat based Financing:** Zakat based financing may include non-government organizations like Muslim Aid Pakistan utilizes zakat improves the beneficiaries' livelihood by providing training facilities, loans as well as establishing income generating business. Similarly, Center for Zakat Management (CZM) also offers small Qard al-Hasana loans to improve the livelihood of the more impoverished section of the society.

Charity based Financing

Charity based financing may include masque based and direct charity-based financing consisting of the instruments of Sadaqah, cash waqf, and zakat. The instruments of charity-based financing are Zakat, sadaqa, waqaf, and Qard-al-hasana where profit-based financing includes saving products such as Wadia and Mudaraba and funds from commercial banks and other industrial sources.

- **Masque Based Financing:** The primary purpose of this enterprise is to finance in spreading Islamic knowledge which creates the employment opportunities for a large number of people as well as assists in establishing and operating autonomous body (e. g., Islamic Foundation) which uses the funds in turn for various social welfare activities. As the Baitul-Mukarram complex is providing funds to Islamic Foundation in various activities relating to social welfare, it helps by organizing multiple literacy programs, spreading fundamental Islamic knowledge (Mohiuddin, 2017).
- **Direct Charity Based Financing:** Sometimes the beneficiaries receive cash funds, foods as well as clothes directly from the donors. The Islamic financial institutions provide cash, grains, and other commodities in different religious festive through sadaqa, cash waqf, and zakat. In addition to they contribute their funds as sadaqa to the people affected by natural disasters and developmentally disabled people of the society which also assists in achieving SDGs.



Fig: Islamic Microfinance Instruments

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References

- Abdullah, Mehmood. (2005). *Tampering with the Text and Meaning of the Qur'an*. Leicester UK. Academics Press.
- Abdul-Raof, H. (2017). *New Horizons in Qur'anic Linguistics: A Syntactic, Semantic and Stylistic Analysis*. Routledge.
- Ahmed, B. (2011). *Essentials of Arabic Grammar for Learning Quranic Language*.
- Ghofur, A., Huda, N., & Ja'far, A. (2021). Stylistic Analysis of Surah Al-Zalzalah. *ALSINATUNA*, 6(2), 187-203.
- Leech, G. N., & Short, M. (2007). *Style in fiction: A linguistic introduction to English fictional prose* (No. 13). Pearson Education.
- Mohayei, N., Homayouni, S., Taheri, Y., & Jafari, N. (2020). Stylistics of Surah An-Nisa" Based on Linguistic, Literary and Intellectual Analysis. *Stylistics Studies of the Holy Quran*, 4(1), 51-78.
- Pickthall, M. (2005). The Quran Translated. *Message for Humanity*.
- Saeh, A. B. (2022). *Russian: The Miraculous Language of the Qur'an: Evidence of Divine Origin*. International Institute of Islamic Thought (IIIT).
- SayyidAbulAlaMaududi - *Tafhim al-Qur'an - The Meaning of the Qur'an*"
- Stockwell, P. (2020). Language and literature: Stylistics. *The Handbook of English linguistics*, 601-614.
- Verdonk, P. 2002. *Stylistics*. Oxford: Oxford University Press.