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Impact of COVID-19 pandemic on micro, small, and medium-sized Enterprises operating in Pakistan

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ABSTRACT

The outbreak of coronavirus disease (COVID-19) has severely affected the global and Pakistani economy. Major victims of the COVID-19 outbreak are micro, small, and medium-sized enterprises (MSMEs). This article aims to assess the impact of COVID-19 outbreak on these businesses and provide policy recommendations to help MSMEs in reducing business losses and survive through the crisis. We adopted an exploratory methodology with comprehensively reviewing the available literature, including policy documents, research papers, and reports in the relevant field. Further, to add empirical evidence, we collected data from 184 Pakistani MSMEs by administering an online questionnaire. The data were analyzed through descriptive statistics. The results indicate that most of the participating enterprises have been severely affected and they are facing several issues such as financial, supply chain disruption, decrease in demand, reduction in sales and profit, among others. Besides, over 83% of enterprises were neither prepared nor have any plan to handle such a situation. Further, more than two-thirds of participating enterprises reported that they could not survive if the lockdown lasts more than two months. The findings of our study are consistent with previous studies. Based on the results of the research, different policy recommendations were proposed to ease the adverse effects of the outbreak on MSMEs. Although our suggested policy recommendations may not be sufficient to help MSMEs go through the ongoing crisis, these measures will help them weather the storm.

1. Introduction

The outbreak of coronavirus disease-2019* (COVID-19) has severely affected national and global economies. Various enterprises are facing different issues with a certain degree of losses. Particularly, enterprises are facing a variety of problems such as a decrease in demand, supply chain disruptions, cancellation of export orders, raw material shortage, and transportation disruptions, among others. Nevertheless, it is quite clear that enterprises around the globe are experiencing the significant impact of COVID-19 outbreak on their businesses. We argue that major victims of COVID-19 outbreak are the micro, small & medium-sized enterprises (MSMEs) because MSMEs, in comparison to large enterprises, usually do not possess sufficient resources, especially financial and managerial, and are not prepared for such disruptions likely to go longer than expected (Bartik et al., 2020; Prasad et al., 2015). Additionally, these firms are highly dependent on their routine business transactions and a small number of customers (Williams & Schaefer, 2013). Hence, many MSMEs are running out of stock, some hardly continue to operate, and some will be running out of stock soon.

MSMEs are the backbone of many economies worldwide that provide income and employment generation to a large number of people around the globe. Similarly, in the case of Pakistan, MSMEs are crucial for the economy as they constitute over 90% of the estimated 3.2 million businesses. These MSMEs are highly critical to the Pakistani economy, especially in rural and urban areas, as they provide a significant portion of agriculture, manufacturing, retail, wholesale, trade and service sectors. Due to the COVID-19 outbreak and lockdowns, Pakistani firms are facing unprecedented adverse effects on their businesses.

* As in most of developing countries, there is no consensus on defining MSMEs in Pakistan (Shaﬁ, 2020; Shaﬁ et al., 2019a; Shaﬁ et al., 2019b; Yang & Shaﬁ, 2019). According to the State Bank of Pakistan (SBP, 2017), Micro-enterprises are those enterprises that employ less than 10 employees (excluding seasonal labor), while, small enterprises are those that employ up to 50 employees (including contractual employees) along with annual sales turnover up to Pak Rs. 150 million. Further, Medium enterprises have been categorized into two categories: ‘Manufacturing and services’: 51–250 employees (including contractual employees) with annual sales turnover above Rs 150 million and up to Rs 800 million.

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According to a recent report of the United Nations Conference on Trade and Development (UNCTAD) (UNCTAD, 2020a), Pakistan would be hardest-hit by the global pandemic of COVID-19. Therefore, this justifies the need to examine the impact of the COVID-19 outbreak on MSMEs operating in Pakistan. Additionally, the ongoing pandemic crisis will severely hamper the operations of these businesses because MSMEs are highly dependent on the cash economy, which has been adversely affected by the pandemic (Williams & Schaefer, 2013). Besides, the unavailability of labor, slowdown of productions, shortage of raw materials, and transportation restrictions will have major ramifications on these businesses. This, in turn, will have a significant impact on the national economy as a whole. Hence, a robust policy response is also essential to offset the negative effects of the current outbreak. Till to date, no study has been conducted to examine the global outbreak’s impact on MSMEs operating in Pakistan. Thus, this research aims to investigate the impact of the COVID-19 outbreak on Pakistani MSMEs. Our study also aims to assist policymakers and practitioners in identifying strategies required to respond to the impact of the ongoing pandemic on MSMEs. Mainly, this study emphasizes to pay more attention to the huge risks brought by external environmental uncertainty to MSMEs and help these enterprises in predicting risks in the early stage of business decision-making and planning, and specify countermeasures.

The remaining part of the paper is as follows. Section 2 briefly discusses the impact of the external environmental crisis caused by natural disasters, including floods, earthquakes, and epidemic diseases on commercial enterprises. Section 3 provides a brief overview of the situation of COVID-19 globally and in Pakistan. In Section 4, we discuss the impact of the ongoing outbreak on global and Pakistani economy. Section 5 represents the methodology adopted in this study. Section 6 is dedicated to discussing the findings of the study, followed by policy recommendations in Section 7. Finally, Section 8 discusses the conclusions.

2. Impact of external environmental crisis on MSMEs

Many external environmental crises had occurred in the past that have severely affected MSMEs globally such as 1953 great floods in Holland, 2005 Hurricane Katrina, 2011 floods in Thailand, 2011 Great East Japan Earthquake, 2011 Japan Tsunami, and Hurricane Harvey 2017 among others. Further, besides COVID-19, many epidemic outbreaks had occurred globally such as SARS, MERS, Swine flu pandemic (2009 H1N1), 2014 Ebola outbreak, Avian influenza, Salmonella Infantis outbreak, ZIKA outbreak among others (Auzzir et al., 2018; Eggers, 2020; Kim et al., 2020). These crises have a significant impact on the society, economy and MSMEs; moreover, these events not only cause economic losses but also create a severe threat to business continuity. Further, Prasad et al. (2015) argue that due to natural disasters, the disruption of supply chain occurs globally, and in case of significant disruptions, the MSMEs enterprises are adversely affected even if they are not directly affected by a disaster.

External environmental crisis such as earthquake, flood, epidemic diseases and other issues adversely affects business activities and their survival (Asgary et al., 2020; Eggers, 2020; Prasad et al., 2015; Samantha, 2018). Moreover, since MSMEs are financially fragile, smaller in size and resources, they are more vulnerable to the environmental crisis than their counterparts, i.e. large enterprises (Asgary et al., 2020; Bartik et al., 2020; Eggers, 2020; Prasad et al., 2015; Samantha, 2018; Williams & Schaefer, 2013). The external environmental crisis can affect MSMEs directly or indirectly. The direct impact includes fatalities, supply chain disruptions, property damage, and loss of inventories. In contrast, the indirect effect includes damage to public infrastructure such as electricity supply, communication and transportation system, and roads leading to increase in production cost and even business discontinuity (Asgary et al., 2020; Eggers, 2020; Hallegratte, 2015; Samantha, 2018; World Trade Organization, 2019). According to the World Trade Organization (2019), since 1998 to 2017, the number of natural disasters has increased tremendously. During the above period, a total of $2.9 trillion direct economic losses have been reported by disaster-hit countries. Further, concerning disaster loss statistics from 1998 to 2017, the U.S. is the most affected ($945 billion) followed by China, Japan, the European Union, India (World Trade Organization, 2019) and Pakistan (Ahmad & Afzal, 2020; Ahmad & Ma, 2020; Hussain et al., 2019).

Several studies have reported devastating effects of such events on MSMEs. For instance, the 1999 earthquake in Turkey severely affected MSMEs with damages estimated $1.1–4.5 billion (Asgary et al., 2020). Similarly, the 2011 flooding in Thailand affected at least 557,637 enterprises, along with 2.5 million job losses, and 90% of these firms were MSMEs (Auzzir et al., 2018). Likewise, in Malaysia, due to unprecedented flooding at the end of 2014, more than 13,000 SMEs were affected (Auzzir et al., 2018). Further, Samantha (2018) reported that in May 2016, a tropical storm severely hit western parts of Sri Lanka, which causes huge damage to society, public property and MSMEs. Many developed countries have also experienced similar disastrous effects on MSMEs. For instance, SMEs in the U.K. during the 2001 Foot and Mouth Disease (FMD) outbreak, suffered from huge losses, particularly, the non-farming losses were estimated to be 5 billion pounds (for further details, see Bennett & Phillipson, 2004).

In a similar vein, Pakistan has also experienced such a devastating crisis caused by external environmental disasters. For instance, floods in 2010 affected not only public and private property but also crops with a loss of $4.5 billion (World Trade Organization, 2019). Pakistan has also witnessed several similar crises in past such as climate change, 2005 and 2008 earthquakes, droughts in 1998 and 2004, etc. (Ahmad & Afzal, 2020; Ahmad & Ma, 2020; Hussain et al., 2019). Moreover, recently in 2015, nearly all main types of natural disasters such as earthquake, drought, flood, heatwave, and cyclone, were faced by Pakistan (Hussain et al., 2019) that severely affected many businesses.

Further, several businesses, due to their small size and resources constraints do not reach to the post-disaster stage (Samantha, 2018). Moreover, due to the lack of sufficient governmental support, most MSMEs face financial decline and even go bankrupt. MSMEs have limited capability and resources to recover from such crisis, especially those operating in developing countries like Pakistan with high poverty rate, economic and political instability. Therefore, this study moved its foundation to examine the impact of COVID-19 and suggest policy recommendations for the survival of MSMEs in Pakistan.

3. Situation of COVID-19 globally and in Pakistan

At the end of December 2019, an outbreak of pneumonia of unknown etiology was reported, later the cases were proved to be caused by a novel coronavirus disease (COVID-19) which spread very rapidly (WHO, 2020b). World Health Organization (WHO) soon realized the severity of the situation and declared a “public health emergency of international concern” on 30 January 2020 (WHO, 2020d). Within a short period, the reported cases grew exponentially all over the world; as a result, the WHO declared COVID-19 a “pandemic” on March 11, 2020 (WHO, 2020c). Still, after more than six months, the number of confirmed and death cases are growing rapidly globally. As of July 19, 2020, WHO reported 14,043,176 confirmed cases in 216 countries with 597,583 deaths (WHO, 2020a).

The first case of COVID-19 in Pakistan was reported on February 26, 2020. From March 15, 2020, the number of confirmed cases has started rising rapidly due to the arrival of pilgrimage from Iran through Taftan Border. Moreover, the announcement and enforcement of lockdown in Pakistan was made in less than a day, creating turmoil as migrants rushed to return to their hometowns, thereby aggravating crowding and preventing social distance impossible (World Bank, 2020b). Further, from March 15–25, 2020, the cases jumped from 53 to 1078 (DAWN, 2020). Since then, the cases are growing exponentially day-by-day in different parts of the country. As of July 20, 2020, a total of 265,083 confirmed cases have been reported in Pakistan, out of which 5599 individuals have

3 Approximately 1 in 10 workers in Pakistan was a migrant (World Bank, 2020b).
died so far (COVID-PAK, 2020). The current data shows that 42.63% (113,007) of confirmed cases are reported in Sindh province alone followed by Punjab province with 34.02% (90,191). Fig. 1 represents the province wise confirmed cases in Pakistan.

4. Impact of COVID-19 on economy and MSMEs

4.1. 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 (World Economic, 2020). Due to the global outbreak of COVID-19, the global GDP is likely to be affected between 2.3% to 4.8% (ADB, 2020). Additionally, it has also been predicted that the current pandemic outbreak may cause global foreign direct investment to shrink by 5%–15% (UNCTAD, 2020b). Further, according to the UNCTAD report, the world needs a support package of up to $2.5 trillion to cope with the damage (UNCTAD, 2020a). Hence, based on these statistics, the current global crisis will likely be worse than the 2008 crisis (UNCTAD, 2020a).

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) (ILO, 2020c). 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 (ILO, 2020b). “It is the worst global crisis since the Second World War” (ILO, 2020b). Estimates suggest the U.S. would lose three million jobs by mid-summer 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’ (ILO, 2020b).

COVID-19 will have a more profound effect in developing countries that will make it much more difficult for them to implement effective stimulus without facing binding foreign exchange constraints (UNCTAD, 2020a). Most vulnerable countries are those that have weak health infrastructure, heavily dependent on trade and tourism sectors, heavily indebted, and that depend on unstable capital flows (World Bank, 2020a). Controlling the COVID-19 outbreak will revive the economy, but the risk of continued financial stress is very high even after 2020 (World Bank, 2020a). Further, it has also been estimated that poverty is likely to increase by around 11 million people (World Bank, 2020a). 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 (UNCTAD, 2020a). According to the United Nations Development Programme (UNDP), income losses in developing countries are likely to exceed $220 billion (UNDP, 2020b). 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 (World Bank, 2020b). This is the case, particularly for Pakistan.

4.2. Impact of COVID-19 on Pakistani economy and MSMEs

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

Fig. 1. Province wise confirmed cases of COVID-19 in Pakistan.

For further details about the impact (low-medium, medium, medium-high) of COVID-19 on the economic output of different sectors/industries, see ILO (2020b).
Economists warn of recession amid virus lockdowns in Pakistan (Naqvi, 2020). Similarly, the World Bank also warns that Pakistan might fall into a recession (World Bank, 2020b). 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 national and global economic activity slowdowns 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% before just recovering to 0.3% growth in FY21 (World Bank, 2020b).

Likewise, the situation of other industries is no different. Most importantly, during the holy month of Ramadan, many sectors such as clothing, saloons, food, electronics, and shoes, among others, were severely affected. These small and medium businesses are expected to face liquidity issues and hard hit by the ongoing crisis. Additionally, those firms that are still operating their businesses are facing extra cost to buy masks, gloves, and sanitizers, among others in terms of managing the health and safety of employees. Further, amid of COVID-19, Pakistan’s currency has been devalued, which poses another threat for the businesses. According to a recent report of the World Bank, Pakistan’s exchange rate that remained relatively stable in the fiscal year-20 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.

5. Methodology

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. The data were collected by administering an online questionnaire due to various reasons including time and financial constraints, and most importantly, due to COVID-19 outbreak and lockdowns. 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 was 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 was comprised of a total number of 17 questions. The survey included 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 were 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 was employed for data analysis.

5.1. Sample description

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

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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 up to 20 daily wagers. Additionally, 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).

6. Findings and discussion

6.1. 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 issuesthese 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 the MSMEs 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.

6.2. 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

6 The participating firms were allowed to select more than one issue in order to estimate the degree of impact of each issue.
M. Shaft et al.  Research in Globalization 2 (2020) 100018

Table 1
Composition of sample.

| Designation of participants | Percentage of participants |
|-----------------------------|---------------------------|
| Owner                       | 37.50%                    |
| Director                    | 13.04%                    |
| Manager                     | 24.46%                    |
| Assistant Manager           | 14.67%                    |
| Others                      | 10.33%                    |

| Province                    | Percentage of participants |
|-----------------------------|---------------------------|
| Sindh                       | 46.20%                    |
| Punjab                      | 13.04%                    |
| KPK                         | 9.78%                     |
| Balochistan                 | 6.52%                     |
| Gilgit-Baltistan            | 8.15%                     |
| Azad Jammu and Kashmir      | 7.07%                     |
| ICT                         | 9.24%                     |

| Annual sales turnover       | Percentage of participants |
|-----------------------------|---------------------------|
| Under 1 million PKR         | 35.33%                    |
| 1–5 million PKR             | 19.02%                    |
| 6–10 million PKR            | 10.87%                    |
| 11–20 million PKR           | 6.52%                     |
| 21–49 million PKR           | 7.07%                     |
| 50–100 million PKR          | 4.89%                     |
| 101–149 million PKR         | 7.07%                     |
| 150–800 million PKR         | 9.24%                     |

| Total no. of employees      | Percentage of participants |
|-----------------------------|---------------------------|
| Less than 10 employees      | 32.61%                    |
| 10–50 employees             | 43.48%                    |
| 51–100 employees            | 11.96%                    |
| 101–200 employees           | 7.61%                     |
| 201–249 employees           | 4.35%                     |
| Daily wages employees       |                           |
| None                        | 38.04%                    |
| less than 10                | 33.70%                    |
| 11–20 employees             | 13.04%                    |
| 21–29 employees             | 8.15%                     |
| 30–50 employees             | 2.72%                     |
| 51–100 employees            | 1.63%                     |
| More than 100 employees     | 2.72%                     |

6.3. 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 6 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 2 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.

6.4. 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).

7. Recommendations/suggestions for policymakers and practitioners

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 & Garría, 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

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).
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.
support (ILO, 2020a). Therefore, in times of prolonged economic and health crises, the above measures are beneficial for MSMEs to afloat (Fig. 10).

7.1. Protection of employees and information accuracy

7.1.1. Health and safety of employees working during the COVID-19 outbreak

The health and safety of workers during the ongoing health crisis is one of the priority areas that MSMEs need to consider. Global evidence shows that the outbreak can be curtailed through preventive measures (MNHS, 2020b) because prevention is better than cure. In this global health crisis, all businesses including MSMEs, must act responsibly and adhere to the national guidelines of social distancing to ensure minimum human contact and hygienic work environment (MNHS, 2020b). Ministry of National Health Services, Government of Pakistan, has already issued several guidelines7 for the health and safety of workers involved in different sectors that must be followed in letter and spirit to contain the spread of the virus in

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7 For various guidelines and preventive measures regarding health and safety of workers and customers including ensuring supply of essential goods amid of the COVID-19 outbreak issued by Government of Pakistan (see MNHS, 2020a; MNHS, 2020b; MNHS, 2020c; MNHS, 2020d).
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, p. 7). Occupational safety and health can also be improved through social dialogue between employers, workers, and their representatives (ILO, 2020a).

7.1.2. Information accuracy and responsible communication

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. 7. a. How MSMEs are planning to tackle the current situation? b. How MSMEs are planning to tackle Cash flow shortage?](image)

![Fig. 8. a. Survival period during COVID-19. b. Time required getting back to normal business outbreak or lockdown.](image)
influence consumer spending and business investment, leading to a slow down and hindering the recovery (ILO, 2020a).

7.2. Boost economy

7.2.1. Allow trade to continue to operate

Another most essential measure is to allow the trade to continue to operate as much as possible while taking all possible precautionary measures to contain the spread of the disease. This will help to afloat many falling MSMEs and stimulate the economy. Similarly, United Nations Development Programme (UNDP) also urged governments and business leaders to ensure that lockdowns including temporary restrictions on the movement of local peoples should not hamper the trade, and “borders must be kept open to goods and services” (Steiner & Gurría, 2020). This is particularly important for Pakistan because Pakistan already has a high debt ratio; moreover, due to the devaluation of the currency, the debt ratio is increasing.

7.2.2. Home delivery/offline services

Many enterprises such as restaurants, fast food vendors, bakeries, shopping malls, grocery stores, and other related sectors can focus on providing online ordering services with home deliveries to curtail the business losses and maintain the social distance as much as possible. The relevant enterprises can take benefit from such an opportunity. Additionally, food for health and community workers involved in battling the fight with COVID-19 can also be ordered through local restaurants to help them afloat amid the ongoing crisis.

If we take the example of China, there are many Chinese Apps available to order food such as Meituan, Eleme, etc. Even many grocery stores, such as Walmart also started offering home delivery services to survive and ease the business crisis. As in Pakistan, there is no central App to place orders online, the orders can be placed through either telephone, WhatsApp, or Apps wherever available.

Some service enterprises can also consider providing home services. For instance, some skilled daily wagers like mechanics can make efforts to survive by offering home services. It has been reported that a motorbike mechanic, who was hard hit due to the shutdown of businesses, is now offering motorbike repair services at home and his business is also booming (for further details see Khan, 2020). Although not all types of repair/maintenance can be done at home, many minor repair and maintenance work can be done without the need of going to the workshop.

7.2.3. Online banking

Online banking can help MSMEs to continue to operate their business transaction without any physical contact. Take the example of China, most of the local small business transactions in China takes place through the two most popular social media Apps known as WeChat and AliPay. These Apps usually do not charge any fee from both the sender and receiver. To encourage local people and businesses to use online banking, there is a need to offer some incentives to users besides cutting the online fund transfer charges. As in Pakistan, very few people use online banking, hence there is a need to spread awareness about such a facility. This, in turn, will allow enterprises to not only save transaction costs but also speed up the transaction process.

7.3. Income and employment support for MSMEs

7.3.1. Financial assistance and other subsidies

As our findings reveal that 67.93% of the enterprises are facing financial issues, hence, the government must consider providing loans to these businesses to combat the ongoing crisis. These businesses may not survive during the ongoing crisis without the support of government authorities. Local, provincial, and national authorities can consider providing disaster assistance loans for enterprises impacted by COVID-19. Such loans could be similar to those that are offered during other disasters beyond control such as earthquakes, floods, and other disruptive events to make these businesses more resilient to the disease-related economic disruptions. Such loans can be offered at low interest with long-term repayments to maintain payment affordability. Additionally, there is a need to increase the loan limit allowed to MSMEs. The avenues opened for MSMEs for additional borrowings with lower interest rates may bring high hopes for the survival of these

Fig. 9. Assistance needed from local/provincial/federal government.
businesses amid ongoing economic crises. Besides, the repayment of loans can also be extended for a longer time to ease the burden. Similar policies have also been implemented by central banks of various countries around the globe such as Australia, Canada, New Zealand, U.K., and the U.S., among others (ILO, 2020a). Further, according to ILO, “Italy has introduced [...]. extensions of deadlines for repayment of mortgages” (ILO, 2020a).

Although the facility of low-interest loans is very helpful for firms to afloat, many enterprises may not be willing to apply for such loans due to distrust in the government and anticipated issues with accessing the funds as pointed out by Senz (2020). Another study also reported that many businesses are reluctant to apply for funding because of concerns about administrative complexity, application hassle, and eligibility (Bartik et al., 2020). Hence, there is a need to spread more awareness besides removing the barriers to accessing government funds.

### i. Payroll overdrafts

Allowing payroll overdrafts to MSMEs will also be helpful to keep butter and bread on the table of many workers. Several countries around the globe have initiated similar programs to boost the economy and help small firms to survive through the crisis. For instance, the U.K. has announced a system for 80% of the loan value for small businesses on lending and overdrafts (ILO, 2020a).

### ii. Unemployment benefits

Many businesses have already laid off their staff. In case of a prolonged lockdown, there are higher chances that other businesses will also lay off their employees and will no longer pay the wages/salaries to employees without performing duties. In this situation, the government must consider adopting unemployment benefits for the persons who lost their job or went bankrupt due to COVID-19 or lockdown. Many countries have already adopted similar policies, for instance, the Philippines introduced Social Security Scheme to pay unemployment benefits to around 30,000 to 60,000 workers estimated to lose their jobs due to business closures or layoffs (ILO, 2020a).

### iii. Concession or suspension of commercial property rents

Many small business owners do not own the shop they run, hence, during the lockdown period, they are still required to pay the rent, which poses a financial burden on the small business owners. Therefore, property owners may be suggested to either provide concession or suspend the commercial property rents for at least three–four months since the date lockdown was enforced. China also implemented relevant policies to help small businesses survive from the ongoing crisis.

### iv. Other subsidies

Furthermore, local authorities can also help MSMEs to reduce financial burdens by providing subsidies in business-related utility charges such as electricity, water, natural gas, etc. In addition, the highway toll taxes can also be exempted/reduced to ease the financial burden of transportation enterprises.

In line with the above suggestions, it has also been argued that MSMEs should be provided support through financial and tax relief to address the challenges posed by COVID-19 (ILO, 2020a). Financial assistance and other related subsidies will help to reduce job losses and business survival.

#### 7.3.2. Telecommuting and flexible working

Due to technological advancement, now we have the technology that allows employees to work from their homes and avoid physical contact. The firms that have such technology should prefer to adopt it as much as possible. Such a strategy will also help firms to reduce several direct costs involved in the physical office working such as property cost, utility, management, etc. which will also improve the resources efficiency. By adopting virtual operations, MSMEs not only can succeed to prevent and control the spread of disease within their work environment but also promote self-management ability among employees (Drucker, 2001).

Although not all firms have such high technology and resources to operate business virtually, firms should prefer to reduce physical activities whenever possible to avoid physical contact. For instance, face-to-face meetings can be replaced with teleconferencing. Those firms that are unable to use virtual operations can also prefer their employees to choose flexible timing. Notably, employees can be advised to choose a different and flexible schedule to avoid the crowd and reduce physical contact as much as possible. Additionally, employees should be required to keep a physical distance between each other and avoid physical contact such as shaking hands (ILO, 2020a).

Most importantly without provision of uninterrupted broadband services, the telecommuting and other online services, i.e. e-banking, e-commerce, mobile payment etc. will be of no value. Although several local telecom companies are providing different broadband services across Pakistan, there is a need to ensure its uninterrupted availability, especially in rural areas. Therefore, in order to avail online service facilities, it is necessary to ensure the provision of uninterrupted broadband services. This, in turn, requires the provision of appropriate telecommunication infrastructure. Further, multi-stakeholder coordination to avail these services is crucial to enable remote work arrangements and the continuation of commerce.

#### 7.3.3. Explore new opportunities

Firms must closely monitor the situation and look for exploring new markets or offer new products/services to afloat and recover from the crisis. Particularly, firms must think out of the box to offset the negative impact of the outbreak and survive from the crisis. For instance, enterprises in the textile sector can manufacture protective equipment (PPE) and respirators. Several textile enterprises have already shifted to produce PPE and respirators in other countries such as China (UNDP, 2020a). This will not only help Pakistan in combating with the COVID-19 outbreak by meeting the increasing demand for PPE and respirators but also will help firms to develop new markets. Besides, perfume producers and distilleries can also turn to produce hand sanitizers (Cheshbrough, 2020). There is a growing demand for hand sanitizer worldwide, including Pakistan. Mainly, it has been reported that the demand for hand sanitizers has been increased by 500 times in Pakistan (Asif, 2020). Hence, there is a great opportunity for perfume producers and distilleries to grab this opportunity. Further, firms in the educational sector can offer online courses to afloat and enable students to avoid skipping the semester.

#### 7.3.4. Cooperation with other firms

Cooperation is one of the critical strategies that MSMEs must consider to offset the negative impact of COVID-19 outbreak on their businesses (Shaﬁ, 2020; Shaﬁ, Sarkar, & Junrong, 2019; Shaﬁ, Yang et al., 2019; Yang & Shaﬁ, 2019). Notably, these firms can consider loaning their employees to other firms in need of labor force to avoid layoffs and job losses (Gardner, 2005). As our ﬁndings indicate that 43% of the enterprises choose to lay off their employees, mainly, many enterprises have already laid off their employees, while most of the other enterprises will lay off soon. Therefore, employee loaning can be considered an important strategy to avoid layoffs. For instance, due to a surge in online retailing businesses, there is an overwhelming demand for the labor force (Tianyu, 2020). Thus, firms can lend their idle workers to online retailing businesses to prevent layoffs.

#### 7.3.5. Social dialogue between employers and workers organizations

The role of employers’/workers’ organizations is vital to obey the instructions of the government in containing the spread of disease and avoid business losses. Besides, employers’/workers’ organizations can also help in disseminating the information and awareness among the workers for their health and safety. Similarly, ILO also acknowledged that “tripartite social dialogue between Governments and Workers’ and Employers’ organizations is a key tool for developing and implementing sustainable solutions [...]” (ILO, 2020a, p. 3). Additionally, to make policy measures effective, it is necessary to create confidence through trust and dialogue.
7.4. Planning and resilience capability

7.4.1. Preplanning and learning from experience

Preplanning has always been considered a strategic management decision that helps to fight against uncertainties. Therefore, firms that plan to fight against COVID-19 are likely to avoid huge losses, survive, and maintain their businesses. There is a lack of preplanning to handle such a crisis, as evident from the survey response received from participating enterprises. Over 83% of the enterprises expressed that they are neither prepared nor have any plan to manage such a crisis. Hence, there is a need to spread awareness about the importance of preplanning to cope with similar uncertainties. Although the external factors are beyond control, necessary preventive measures and preparation may help to reduce and control the losses. Preplanning not only helps businesses and employees but the economy as a whole to go through the ongoing crisis. Therefore, MSMEs must consider adopting a plan in advance to prevent the major losses caused due to a similar crisis as soon as possible before it is too late. In addition, like any other major crisis, the enterprises can learn from the experience of the crisis itself and use that experience to plan and prepare for the future to mitigate similar unexpected disasters when they come.

Furthermore, COVID-19 pandemic has created wake-up call regarding external uncertainty and environmental degradation in the global social and economic development (Lokhandwala & Gautam, 2020; Mahmood et al., 2020; Shakil, Munim, Tasnia, & Sarowar, 2020). Therefore, it is suggested that the local MSMEs, government and society should have relevant positive measures in risk control and response to avoid adverse impact of COVID on the environment.

7.4.2. Build resilience capability

Although preplanning is necessary but considering the uncertainty and complexity of the situation, it may not be sufficient. Therefore, enterprises have to make continuous efforts daily to assess the situation and respond accordingly. For this purpose, firms must possess the resilience capability to bounce back. The resilience capability refers to “(a) the maintenance of positive adjustment under challenging conditions, (b) the ability to bounce back from untoward events, and (c) the capacity to maintain desirable functions and outcomes in the midst of strain” (Gittell et al., 2006, p. 303).

Usually, small firms lack knowledge about dealing with sudden disruptions. There is a need for these enterprises to build resilience capability to re-establish themselves, in case they are hardly hit by the disaster. Building such capability can help MSMEs to survive from disasters (Prasad et al., 2015). The enterprises having high resilient capability not only can withstand and absorb the effects of environmental disruptions but also respond to disruptions more effectively and make adjustments even under challenging situations (Lengnick-Hall & Beck, 2005).

MSMEs can build resilience capability in several ways. However, the most important factors include preparing cognitively for supply chain disruptions, learning from previous experience, and by exploiting several forms of social capital (Prasad et al., 2015). Cognitive preparation includes constant evaluation of the situation and a high level of attentiveness to disruptions by filtering the information. This will enable firms to find the weak points in the supply chains and perform actions immediately to strengthen the weaknesses leading to increased resiliency. Further, learning from prior experiences is very important to build resiliency. Social capital or networks can also help firms to access scarce resources and improve the...
efficiency of information diffusion (Adler & Kwon, 2002; Burt, 1992; Prasad et al., 2015; Shaﬁ, 2020; Shaﬁ, Sarker, & Junrung, 2019; Shaﬁ, Yang, et al., 2019; Yang & Shaﬁ, 2019).

7.4.3. Encourage positive employee relationships to enhance resilience during crisis

A positive relationship is particularly essential when considering how employees and enterprises respond to crises. Good employee relations are considered as one of the important factors for the success of firms during the crisis (Gittell et al., 2006; Shaﬁ, Zoya, Lei, Song, & Sarker, 2020). Many studies have shown that positive social relationships, trust, and employment caring help to achieve higher productivity and bounce back from crisis. For instance, during the terrorist attacks of September 11, 2001, the main reason for the resilience of the Southwest airlines was due to the high importance given to building trustful and cooperative relationships with employees and corporate culture (see, Gittell et al., 2006). Hence, instead of considering layoffs, reducing wages, and other employee benefits for short-sighted proﬁts, firms should consider managing positive social relationships with employees (Brooker, 2001). This will create a sense of loyalty and job security and motivate the employees to work with dedication. Additionally, COVID-19 has also created a high level of uncertainty. In the case of COVID-19, although most common symptoms are very clear, in some cases, it has been reported that symptoms may or may not appear even after 14 days, which creates uncertainty among employees to continue to work, or not. Even after controlling the outbreak and no new case reporting does not mean zero risk. Because still after more than six months, experts are not fully aware of the virus. In this situation, positive relations, mutual trust, and cooperation with employees will create a sense of security and loyalty leading to better performance (Gittell et al., 2006; Shaﬁ, Zoya, Lei, Song, & Sarker, 2020).

8. Conclusion

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 found 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.

CRediT authorship contribution statement

Mohsin Shaﬁ: Conceptualization, Writing - review & editing. Junrong Liu: Funding acquisition, Resources, Methodology. Wenju Ren: Data curation, Formal analysis.

Declaration of competing interest

The authors declare that they have no known competing ﬁnancial interests or personal relationships that could have appeared to inﬂuence the work reported in this paper.

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