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The Impact of the COVID-19 Pandemic on Pakistan's Small and Medium-Sized Businesses for Economic Rehabilitation

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ABSTRACT

The coronavirus pandemic (COVID-19) has wreaked havoc on the world's economy and Pakistan's. The COVID-19 dilemma has inflicted small and medium businesses (SMEs). This study aimed to look at how the COVID-19 epidemic has affected these enterprises and propose policy suggestions to help small businesses avoid losses and overcome challenges. We used exploratory methods to perform exploratory research, including a thorough assessment of current professional literature, such as policy papers, research papers, and reports. We performed an online survey of 190 micro media outlets in Pakistan to back up the empirical findings. The data were assessed using descriptive statistics. The majority of the firms who took part in the poll had bad findings. They are dealing with various financial and supply chain issues and a drop in demand, sales, and earnings. Furthermore, more than 86 percent of individuals are unprepared for such events and have no procedures to deal with them. Moreover, more than two-thirds of the enterprises involved indicated that they would lose money if the blockage lasted longer than two months,. Our findings are in line with those of earlier studies. Many legislative proposals have been made based on the survey results to lessen the pandemic's detrimental influence on the media. Our policy ideas may not be enough to help very small businesses survive the current crisis, but they will assist them in doing so.

Introduction

Several policy proposals have been made in reaction to the research authors' findings to lessen the pandemic's influence on the media. Our policy ideas may not be sufficient to adapt small firms to today's climate, but they will aid in the resolution of this issue. Safi and colleagues (Shafi et al., 2020). Many businesses rely largely on repetitive processes and tiny customer segments (Yang and Chuang, 2020). Consequently, many small enterprises have been depleted, while some have managed to survive and others are on the edge of extinction. Small enterprises are the backbone of many economies worldwide, providing money and employment to millions of people. Similarly, small and medium-sized businesses (SMEs) are critical to Pakistan's economy, accounting for more than 90% of the country's estimated 3.2 million businesses, contributing more than 40% of GDP and 40% of net exports (Beraha and Đuričin, 2020).

Pakistan has been the most afflicted by the COVID-19 outbreak internationally, according to research by the United Nations Conference on Trade and Development (UNCTAD) (Dhewanto et al., 2020). Thus, determining the impact of the COVID-19 epidemic on Pakistani SMEs. Because small and medium-sized firms are primarily dependent on the influenza-ravaged economy, the continued epidemic will substantially impact businesses (Ravindran and Boh, 2020). Furthermore, personnel constraints, decreasing production, raw material limitations, and transportation restrictions impede the business activities. This will have a significant influence on the entire country's economy. Therefore, significant government responses are required to mitigate the pandemic's detrimental effects. To our best knowledgement, there has been no research into the epidemic’s impact on Pakistan's SMEs. Thus, the objective of this research was to determine the impact of the COVID-19 issue on Pakistan's SMEs. Our research also intended to assist policymakers and professionals in finding solutions to the pandemic's long-term impact on SMEs. This study highlighted the need for SMEs to pay greater attention to the enormous risks posed by the external environment's unpredictability, forecasting hazards, and devising remedies during the early phases of company planning and decision-making.

The impact of the external environmental crisis on small companies

The natural disasters, including floods in the Netherlands in 1953, Hurricane Katrina in 2005, floods in Thailand in 2011, the East Japan earthquake in 2011, the Japanese tsunami in 2011, and Hurricane Harvey in 2017 have had a big impact. It's a minor issue. - There will be media from all across the world. Aside from COVID-19, numerous other outbreaks have occurred globally, including SARS, MERS, and the 2014 swine flu pandemic (Bańkowska et al., 2020). Ebola, avian andSsalmonella influenza, and Zika virus infections have also been reported (Song et al., 2020). The crisis has significantly impacted society, the economy, and SMEs. Furthermore, these calamities result in financial losses and represent adanger to business existence. It also argues that natural catastrophes have a worldwide influence on the supply chain (Syriopoulos, 2020). Even if small firms are not directly impacted, a significant influence can be detrimental (Gerald et al., 2020).

Earthquakes, floods, epidemic outbreaks, and other dangers have a detrimental effect on company operations and survival. Furthermore, SMEs are more exposed to environmental risks than large firms due to financial uncertainties, small scale, and limited resources (Razumovskaia et al., 2020). Small firms and SMEs may be impacted directly or indirectly by the external environmental crises. Direct repercussions include death, supply chain interruption, property loss, and inventory loss. On the other hand, indirect effect can harm public infrastructure and roadways, such as electricity generation, telecommunications, and transportation networks, as well as raise production prices

and disrupt the economy (Verbeke, 2020). Natural catastrophes surged dramatically between 1998 and 2017, according to the World Bank. The overall economic losses recorded by the impacted nations during the prior analytical period were US$2.9 billion (Jallow et al., 2020). Based on catastrophe loss statistics from 998 to 2017, the United States ($945 billion) was the country that sustained the greatest damage, followed by China, Japan, the European Union, India, and Pakistan (Gbadamosi et al., 2020; Jallow et al., 2020). The Turkey earthquake in 1999, for example, had a large media effect, with losses estimated to be between 1.1 billion and 4.5 billion USD (Lokhandwala and Gautam, 2020). Similarly, Thailand's floods in 2011 devastated at least 557,637 businesses and resulted in the loss of 2.5 million employment, 90% of which were SMEs (Jallow et al., 2020). In addition, unexpected floods in Malaysia harmed around 13,000 SMEs towards the end of 2014. (Calvo Gallardo et al., 2020) also reported that a tropical cyclone damaged the western United States in May 2016. The authors also mentioned that a tropical hurricane ravaged western Sri Lanka in May 2016, destroying firm property and SMEs. Similar natural disasters have occurred in several wealthy nations. The SMEs in the United Kingdom, for example, experienced significant losses during the foot-and-mouth disease epidemic in 2001, with non-agricultural spending anticipated to exceed 5.5 billion USD (see Bennett and Phillipson, 2004 for details).

Pakistan has also been hit by natural catastrophes from outside the country (Bartik et al., 2020; Doern, 2016). The 2010 flood, for example, devastated governmental and private structures as well as crops, costing 4.5 billion USD in damages (Bartik et al., 2020). Climate change, earthquakes in 2005 and 2008, droughts in 1998 and 2004, and other natural disasters had strucked Pakistan. Furthermore, Pakistan was hit by nearly all major types of natural disasters in 2015, including earthquakes, droughts, floods, heatwaves, and cyclones, all of which wreaked havoc on various businesses.

COVID-19 Situation in the world and Pakistan

At the end of December 2019, an unknown pneumonia epidemic was confirmed. However, it was eventually determined that the case was caused by a new coronavirus quickly spreading (Dai et al., 2017). The World Health Organization (WHO) acknowledged the disease's gravity on January 30, 2020, and called it a "public health emergency of global significance" (Berger, 2016). In March 2020, the WHO classified COVID-19 as a "pandemic" due to the significant growth in the number of reported cases worldwide in a short time (Acs et al., 2016). Even six months later, the number of verified and fatal cases continues to grow globally. The WHO has confirmed 14,043,176 cases (597,583 fatalities) in 216 countries as of July 19, 2020.

COVID-19 was discovered for the first time in Pakistan on February 26, 2020. The number of confirmed pilgrims entering Iran through the Taftan border has increased dramatically since March 15, 2020. More notably, Pakistan's blockade was enacted less than a day after the declaration, resulting in rioting, increased traffic congestion, and disturbed social norms as immigrants rushed into the city (Acs et al., 2016). Furthermore, the number of cases grew from 53 to 1,078 between March 15 and 25, 2020 (Leonhardt and Thompson, 2017). Since then, the number of cases has progressively climbed in various parts of the country. Pakistan had 265,083 confirmed cases and 5,599 fatalities as of July 20, 2020. Sindh County accounted for 42.63% of confirmed cases (113,009), while Punjab County accounted for 34.03% (34,039).The confirmed cases in Pakistan are shown in Figure 1 by region.

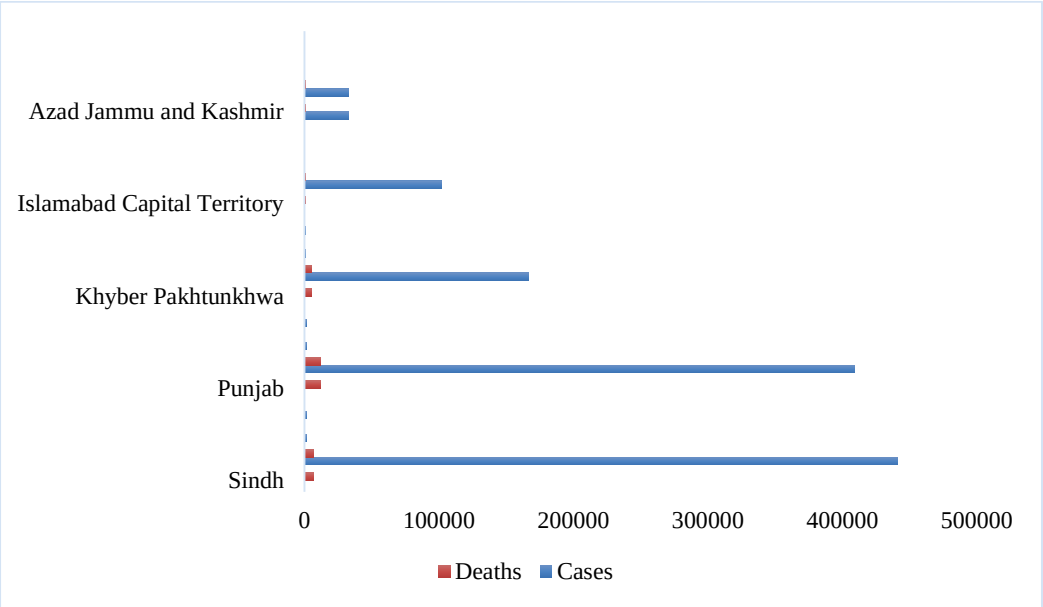

Fig. 1: COVID-19 confirmed cases and deaths in Pakistan by provinces and Azad Kashmir.

COVID-19's Impact on the Pakistan Economy and Mirco-SMEs

City closures worldwide, reduced worker mobility, travel bans, airline suspensions, and most importantly, economic crises are all examples of disease's social and economic impact. From February 21 to March 24, 2020, the COVID-19 crisis swept the world, and the number of patients continued to grow at an alarming rate. The COVID-19 pandemic is expected to disrupt all economic growth (Johnson, 2015). Due to the COVID-19 global pandemic, the global GDP is expected to reduce from 2.3% to 4.8%. In addition, it is estimated that the current pandemic will reduce global FDI by 5% to 15% (Johnson, 2015). UNCTAD also estimates that the world will need a 2.5 trillion USD aid package to repair the damage. Based on these data, the current global crisis is expected to be far worse than the disaster in 2008 (Shafi et al., 2019). According to the International Labor Organization (ILO), the impact of COVID-19 on housing and food services, real estate, wholesale and retail, car and motorcycle repairs, and education is "high," while the impact on services is "low". .. And defense. There is also social work. There is also human health and education.

In addition, the most vulnerable countries lack access to health care, rely heavily on trade and tourism, have high debts and unstable capital flows (Tunio et al., 2021; Umar et al., 2020). Reducing the COVID-19 outbreak is good for the economy, but economic problems will likely continue beyond 2020 (Hepburn et al., 2020). Furthermore, the poor population is expected to increase by approximately 11 million people. Although the epidemic's impact on the economy is still perceived by people and increasingly difficult to predict, the situation in emerging markets will deteriorate before improving (del Rio-Chanona et al., 2020). The United Nations Development Program (UNDP) estimates that the loss of income in developing countries will exceed $220 billion (Baloch et al., 2021). The World Bank also recently predicted that South Asia would have its worst economic performance in 40 years, and half of the countries in the region would fall into a severe recession, especially in Pakistan.

The impact of COVID-19 on Pakistan's economy and SMEs

Due to the COVID-19, Pakistan has lost one-third of its imports and half of its exports (Abdullahi, 2019). Economists believe that the limitations of the Pakistan virus will lead to an economic recession (Li et al., 2020). The World Bank also believes that Pakistan may fall into recession (Mukanjari and Sterner, 2020). Pakistan’s real GDP growth in FY20 is expected to slow by 2.4%, reflecting a sharp slowdown in domestic and global economic activity in the last few months of this fiscal year (Furceri et al., 2020). If the COVID-19 pandemic worsens and lasts longer than expected, Pakistan's real GDP growth rate may slow to 2.2% in 2020 and return to 0.3% next year.

The most important and direct result of the blockade is the suspension of activities. Sindh province was banned for the first time in March 2020. Karachi is a city in Sindh province and the country's main industrial area, accounting for 30% of its total exports. Due to the closure, only about 50 of Karachi's 2,700 industries reopened on the first working day (Umar et al., 2020). More importantly, about 5 million people living below the poverty line in Pakistan (ref). Construction, transportation, and domestic workers are all low-skilled or low-skilled workers (such as manual workers and garbage pickers). Employees are employed in various sectors, including service industries and agriculture, and rely on income to meet basic needs. According to the author, approximately 4 million people live in Karachi. In addition, Punjab province employs nearly 4 million people. One-day bets are most often violated by bans.

Then there are small business groups (also known as freelancers), which rely heavily on small businesses such as individual businesses, family businesses, and street vendors. From agriculture to education, these businesses are usually owned by family members. These small businesses are also included in the informal economy 5 because most businesses are not local. Therefore, it is difficult to estimate the number of such enterprises. According to the latest data, SME) or self-employed individuals employ 35.7% of the country's total labor force (Arif et al., 2021). Agriculture also employs more than 87% of the labor force, three-quarters of the wholesale and retail industry, 50% of the catering industry, three-fifths of the real estate and retail industry, and more than two-fifths of the industry. Transportation and industry (Estrada et al., 2020). For more detailed information on the vulnerabilities of small businesses in specific sectors, see Figure 2 (self-employed). The figure above illustrates the impact of the COVID-19 outbreak on small businesses.

Small businesses are close behind. Many small businesses also face major challenges. For example, the textile and apparel industries have been hit hard by the closure. Beverages, food, tobacco, and textiles account for 54% of Pakistan’s manufacturing exports. The decline in demand in these sectors will have a proportionately negative impact on Pakistan. Agricultural companies are not defenseless. For example, in Sindh and southern Punjab provinces, cereal harvesting usually starts at the end of March and continues until mid-June. Due to a lack of human resources and transportation, the department still faces many challenges. Many local traffic drivers were sent home, including bus drivers, taxi drivers, and rickshaw drivers. Whole sale and retail services, transportation, warehousing, and communications are affected by store closures and disruptions in the national supply chain (Štreimikienė and Kaftan, 2021).

In addition, for the health and safety of employees, companies that continue to operate must bear the additional costs of purchasing masks, gloves, and disinfectants. Besides, Pakistan's currency weakened due to COVID-19, posing a new threat to businesses. According to a recent report by the World Bank, Pakistan’s exchange rate fell by 7.3% in March after remaining relatively stable in the 20th fiscal year from June to February (Hepburn et al., 2020).

Research Methods

This research used an exploratory method that includes a comprehensive review of relevant literature, including policy papers, research articles, and reports. We collected data from SMEs in Pakistan to supplement the empirical data. Due to various factors, such as the spread and blockade of COVID-19, as well as time and cost constraints, information was collected through online questionnaires. Many other researchers, such as da Cruz Perez et al. (2020), used a similar method and found that it saves time and money. In order to increase the response rate, we decided to use our network of personal and professional researchers. To encourage potential companies to participate in online surveys, we interact with companies through various social media platforms, including WhatsApp, Facebook, LinkedIn, and email. All interviewees were guaranteed to be completely anonymous to allow many companies to participate in the survey. The survey contains a total of 17 questions. The survey investigated the company's key information and characteristics, the impact of the COVID-19 crisis on the company, the decline in sales and profits, the life span, the normalization phase of the business, and the distress signal sent to the government. Participation in this research had no financial motivation and was voluntary. Before the survey is officially launched, the questionnaire questions were pre-tested by a group of small business owners to assess clarity and relevance and identify and eliminate potential errors. The data is collected using snowball sampling technology, which is popular because of its cost-effectiveness and time-saving advantages (Muhareb and Giacaman, 2020). Between April 09, 2020, and April 21, 2020, we collected data using a snowball sampling strategy. The survey included 184 MSMEs from various cities across Pakistan who shared their perspectives. A descriptive analysis method was used to analyze the data.

Sample description

Sindh province has the highest percentage of participation (49.23%), followed by the Punjab (16.07%), Khyber Pakhtunkhwa (KPK, 8.81%), Islamabad Capital Territory (ICT, 10.28%), Gilgit-Baltistan (8.17%), Azaad Jammu and Kashmir (AJK, 8.07%), and Baluchistan (7.07%). Around 90% of the responders were either MSMEs owners or in management roles. Over 90% of the participating businesses have less than 150 million Pakistani rupees yearly sale. Additionally, the study results showed that over 32% of businesses have fewer than 10 employees, more than 43% have between 50 and 100 employees, and only around 12%have more than 100 employees. The bulk of the participating businesses are MSMEs, as proven by this ratio. Furthermore, over 38% of businesses do not employ daily wage workers, while over 33% employ fewer than 10 daily wage workers. Besides, up to 20 daily wagers are made by more than 13% of businesses. More than 8% of participating companies reported a maximum of 29 bets per day. Therefore, a large number of employees will be affected by the COVID-19 outbreak. Table 1 shows the sample information.

Table 1: Sample composition for Micro-SMEs

	participant %
Participants' designation	
Owners	48.60%
Directors	24.05%
Managers	35.57%
Assistant Managers	25.78%
Others	20.44%
Provinces	

Sindh	57.30%
Punjab	24.06%
KPK	8.98%
Balochistan	7.35%
Gilgit-Baltistan	9.62%
Azad Jammu and Kashmir	8.08%
ICT	8.35%
Annual sales turnover	
Under 1 million PKR	75.44%
2–6 million PKR	28.03%
7–20 million PKR	20.98%
22–30 million PKR	7.63%
23–58 million PKR	8.08%
60–200 million PKR	5.98%
202–258 million PKR	8.08%
260–900 million PKR	8.35%
Total no. of employees	
Less than 10 employees	43.72%
20–60 employees	54.59%
62–200 employees	22.87%
202–300 employees	8.72%
302–338 employees	5.46%
Daily wages employees	
None	49.03%
less than 2 0	44.80%
22–30 employees	24.05%
32–38 employees	7.26%
40–60 employees	3.83%
62–200 employees	2.72%
More than 200 employees	4.94%

Furthermore, retail and wholesale (27.72%), agriculture, forestry and fisheries (10.87%), catering and hotels (9.78%), and consumer goods manufacturing (9.78%) accounted for most of the industries studied (see Figure 3).

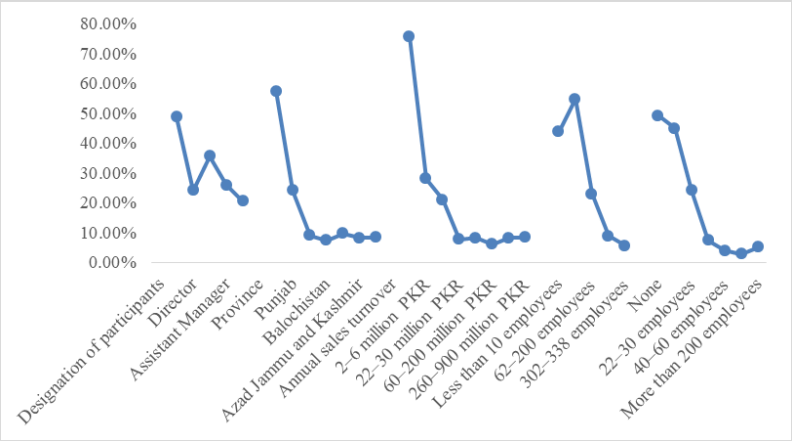

Fig. 3: The sample was distributed to the industry

Results and Discussion

As expected, the COVID-19 outbreak has had a major impact on Pakistan's SMEs. More than 94.57% of the respondents said that the ongoing coronavirus outbreak or lockdown had affected them to some extent, while 3.26% said it had no effect, and 2.17% said they were not sure. The study did not include companies that are uncertain or claim that the COVID-19 outbreak or shutdown has no impact on their operations. After deleting these responses, the total sample size was reduced to 174.

Table 3: Correlation matrix and summary statistics

stats	Mean	Std. Deviation	Percentile Mean			
			p25	p50	p75	p95
LDX	8.5516	1.3458	7.3835	8.5868	9.2973	10.9486
LGX	1.6115	0.4516	1.3628	1.5458	1.777	2.8222
RET	−0.0004	0.0172	−0.0057	0.0001	0.0069	0.0214
LVO	12.5035	2.8684	10.9517	12.1886	13.7329	18.9515
LVX	3.0429	0.4835	2.6204	2.8888	3.383	3.9976
RVX	0.0016	0.0907	−0.0542	−0.0072	0.0364	0.1652
RMW	0.0004	0.0169	−0.0038	0.0008	0.0062	0.0233
RME	0.0002	0.0138	−0.0048	0.0007	0.0063	0.0185
MPR	2.2345	3.3538	0	0.91	3.76	9.26
LOP	3.7818	0.3725	3.6596	3.9692	4.0368	4.1098
LGD	5.5955	1.4128	4.5334	5.189	6.3748	8.4726
RES	4.2158	0.3384	3.8894	4.3839	4.5018	4.576
CPS	4.2257	0.138	4.1559	4.2504	4.3203	4.4056
COG	4.282	0.1905	4.1749	4.3193	4.4143	4.5802
OIN	4.2802	0.1512	4.187	4.3123	4.3958	4.4444
INQ	4.3327	0.1894	4.1905	4.3669	4.5018	4.5688
PRO	3.2304	0.6424	2.7263	3.4399	3.6938	4.0509
HEL	4.358	0.0849	4.3233	4.384	4.4077	4.4598
FID	0.648	0.1772	0.517	0.6728	0.7913	0.8769
FII	0.6839	0.1732	0.5652	0.7014	0.838	0.95

Author calculation

Table 4: Correlation matrix and summary statistics

Variable	Developed-Markets		Emerging-Markets		Comparison analaysis		Rank-Sum analysis
	Mean	SD	Mean	SD	Mean	Variance	
RES	4.4928	0.0773	3.9392	0.265	−142.52***	6609.36***	83.17***
CPS	4.3033	0.092	4.1482	0.1314	−68.76***	655.78***	55.26***
COG	4.3654	0.1355	4.1968	0.1998	−49.76***	684.65***	42.34***
MPR	0.3264	0.7378	4.1425	3.8303	69.29***	3529.96***	−72.06***
LGD	5.9798	1.5023	5.212	1.193	−28.31***	166.34***	26.86***
OIN	4.2626	0.1643	4.2968	0.1356	11.22***	219.95***	−16.52***
INQ	4.4612	0.0985	4.205	0.1702	−95.97***	533.37***	68.76***
PRO	3.7075	0.2262	2.7532	0.5658	−110.92***	4695.08***	78.37***
HEL	4.4062	0.0315	4.3078	0.0927	−71.13***	3955.91***	69.67***
FID	0.7697	0.1012	0.522	0.1484	−97.15***	717.99***	69.12***

FII	0.7983	0.1113	0.5624	0.1415	−91.76***	193.33***	67.86***

Note: The following table provides a statistical comparison of the macroeconomic characteristics of developed and emerging countries in our sample countries. We use International Monetary Fund (IMF) guidelines to identify emerging economies in mature countries. We use t test, Levene (1960) strong F test, and Wilcoxon Rank-Sun (Mann-Whitney) to compare the average price, volatility, and average difference between the mature market group and the emerging market group. The symbols ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.Author's calculation

The most basic model is the mean and conditional variance model

Column 5(1) of the table summarizes the results of the dynamic graph with consistent results, indicating that COVID-19 is hurting market returns in the sample economies. The overall index performance dropped by 0.17% and 0.79%, while the total number of COVID-19 cases (CTC) and total deaths (CTD) increased by 1% and 1%, respectively. In several countries, the number of deaths caused by COVID-19 (CSD) has increased by 10%, while agricultural production has fallen by 0.51%. Analyze market sentiment and corporate behavior based on sales and sales (LVO) VIX (RVX) and COVID-19. Table 6shows that RVX negatively impact returns (6.43%). However, you can use oil prices (LOP) and quarterly GDP (LGD) to adjust for variance and size differences among sample economies. Only a 1% LOP level is noticeable, with a positive impact of 4.69% or 0.01% on performance.

Table 5: Basic volatility model

Variables	**RET**	**Conditional Variance Process**	**Conditional Variance Process**
RETt-1	0.0003		
	-0.0251		
RVX	−0.0643***		
	-0.0065		
LVO	0.0003		
	-0.0005		
LOP	0.0469***		
	-0.0046		
LGD	0.0001		
	-0.0003		
CTC	−0.0017***	4.3095***	2.2169
	-0.0003	-0.5176	-6.1079
CTD	−0.0079***	2.7830***	−5.9128
	-0.0008	-0.3749	-4.761
CSC	0.0003	0.0561*	1.1170**
	-0.0019	-0.0314	-0.5408
CSD	−0.0051*	0.2407***	1.5135**
	-0.0029	-0.0395	-0.6985
RES		–	−0.2890***
			-0.0469
RES*CTC		–	0.4601
			-1.4461
RES*CTD		–	2.2313**

			-1.1241
RES*CSC		–	−0.2414*
			-0.1237
RES*CSD		–	−0.2904*
			-0.1593
α		0.0077	0.0008
		-0.0145	-0.0139
γ		0.4928***	0.4702***
		-0.0208	-0.0213
δ		0.3987***	0.3325***
		-0.0397	-0.0385
λ0		−5.3731***	−4.7474***
		-0.3449	-0.3695
p-value for equality of CTC and CTD	0.016	0	
p-value for equality of CTC and CTD	0.015	0	
Observation	9,848	5,989	5,989
R2	0.1844		
No. of provinces	34		
Time FE	Yes	No	No
Country FE	Yes	No	No

Author calculation

The COVID-19 outbreak has had a significant impact on most participating companies, according to the statistics in Table 5. More than 38% of respondents said the economic downturn significantly impacted their company (91% to 100%). Finances (67.93%), supply chain disruption (47.83%), and decline in demand (44.02%) were listed as the top three problems these companies faced during COVID-196.

COVID-19 and corporate long-term planning

The front is shown in Table 6. Table 5 contains the results in columns (1) to (5). (12). Overall, the market divergence is positive, and it is directly related to changes in the total number of COVID-19 cases (CTC and CSC) and deaths (CTD and CSD). Global confirmed cases (highest 4.48) and deaths (highest 3.84) have a higher impact on the stock market than domestic confirmed cases (highest 0.08) and deaths (highest 3, 84), as shown in Table 4. (Column 2 of a two-column table) (The highest value is 0.26.).

Table 6: Shows the impact of the Resilience Score

	-1	-2	-3	-4	-5	-6
Var.	Conditional Variance Process					
CTC	4.3020***	4.0567***	4.1910***	4.3933***	4.3159***	4.3071***

	-0.5228	-0.5319	-0.5231	-0.5176	-0.5175	-0.5226
CTD	2.7650***	3.8377***	3.2195***	2.5552***	2.6472***	2.7916***
	-0.3753	-0.3772	-0.3754	-0.3744	-0.3749	-0.3754
CSC	0.0565*	0.0745**	0.0790**	0.0548*	0.0517	0.0479
	-0.0308	-0.0331	-0.0312	-0.0311	-0.0317	-0.0312
CSD	0.2395***	0.1995***	0.2002***	0.2445***	0.2479***	0.2496***
	-0.0388	-0.0417	-0.0393	-0.0392	-0.04	-0.0393
RES	−0.2068***					
	-0.0233					
CPS		−0.8825***				
		-0.0783				
COG			−0.4614***			
			-0.0471			
MPR				0.0104***		
				-0.0025		
LGD					−0.0085	
					-0.0066	
PRO						−0.1247***
						-0.0132
OIN						
INQ						
HEL						
FDI						
FII						
α	−0.0016	−0.0115	−0.0135	−0.0001	0.0003	−0.0034
	-0.0137	-0.0144	-0.0149	-0.0135	-0.0135	-0.0137
γ	0.4820***	0.4527***	0.4654***	0.4896***	0.4912***	0.4778***
	-0.021	-0.0219	-0.0219	-0.0208	-0.0207	-0.0211
δ	0.4031***	0.3169***	0.3671***	0.4232***	0.4075***	0.3963***
	-0.0408	-0.0387	-0.0389	-0.0418	-0.0402	-0.0411
λ0	−4.4659***	−2.3794***	−3.6847***	−5.1830***	−5.2460***	−4.9949***
	-0.3462	-0.4036	-0.3434	-0.3621	-0.3472	-0.3496
Obs.	5,989	5,989	5,989	5,989	5,989	5,989

Note: The robust standard errors are reported in parentheses.***, ** and * indicates statistical significance at the 1%, 5%, and 10% levels, respectively.

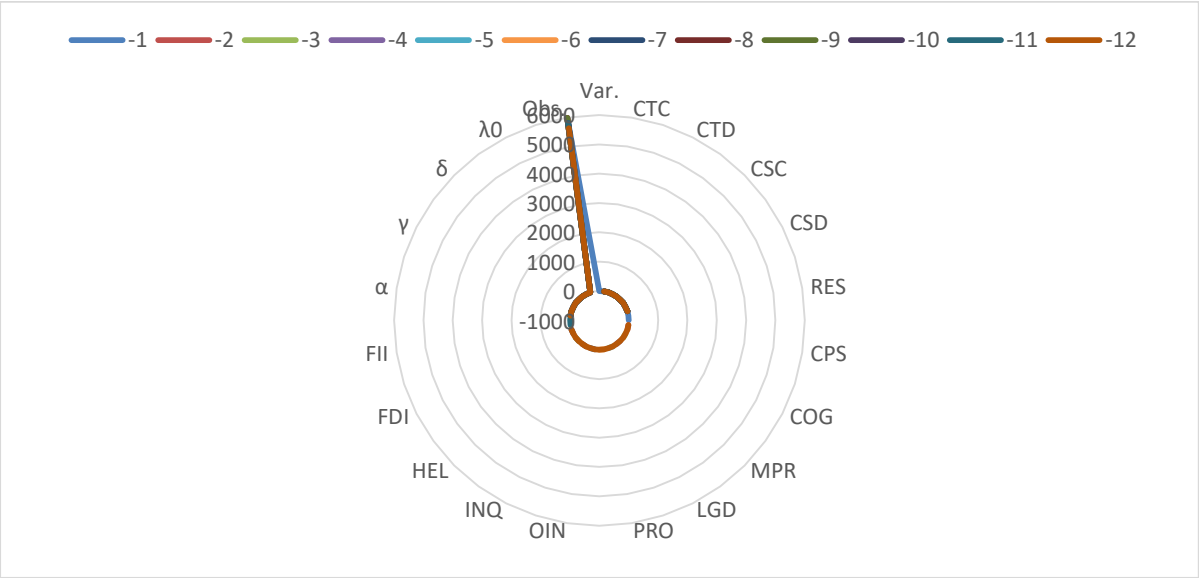

Fig. 4: Degree of the impact of the lockdown due to the COVID-19 on SMEs

When asked about the revenue decline in 2020, three-quarters of participating companies predicted a decline of more than 60%. More than two-thirds of companies estimate that by 2020, the COVID-19 pandemic will cause profits to fall by more than 60% (Figure 6). Small businesses in other countries are also in the same situation. According to the American Small Business Association survey, 49% of small companies showed a decline in customer demand, 33% have experienced supply chain disruptions, and 20% of company employees are absent. Given that the current problems are more serious than the 2008 financial crisis, these numbers are not surprising.

MSMEs' strategies for dealing with the current Situation

The organization has adopted various measures to deal with the business problem. In particular, 31% of loans have been closed fully, 19% have been partially closed, and 18% are being considered. Furthermore, corporations get access to 13% of the amenities. Most companies in Pakistan have been required to close to prevent the disease from spreading. Consequently, several of the participating businesses reported greater transaction rates. Only 4% of companies said they desire to diversify their activities to deal with the danger posed by COVID-19. Furthermore, 2% of people find it challenging to work from home. One of the most efficient strategies to keep safe and limit the danger of infection is to work from home as often as possible. Additionally, limiting travel is a more efficient and cost-effective strategy to minimise disease burden. However, not all small firms have the means to put this strategy into action. Also, 13% of respondents stated that their vacation alternatives are limited.

Table 7: Impact of Resilience Score (MSMEs)

Variables	**(7)**	**(8)**	**(9)**	**(10)**	**(11)**	**(12)**

Var.						
CTC	4.4816***	4.2993***	4.2842***	4.1902***	4.2002***	3.9934***
	-0.5212	-0.5232	-0.5196	-0.5259	-0.5261	-0.5478
CTD	2.0794***	2.9027***	2.7392***	2.4677***	2.4600***	3.4363***
	-0.3794	-0.3755	-0.3751	-0.3801	-0.38	-0.3896
CSC	0.053	0.0455	0.0412	0.0503	0.0503	0.0608
	-0.0327	-0.0317	-0.0317	-0.0316	-0.0314	-0.0376
CSD	0.2462***	0.2567***	0.2614***	0.2510***	0.2508***	0.2152***
	-0.0405	-0.04	-0.04	-0.0399	-0.0396	-0.0466
RES						
CPS						−0.8868***
						-0.1128
COG						−0.2955***
						-0.0686
MPR						−0.0029
						-0.004
LGD						−0.0170
						-0.0104
PRO						0.0238
						-0.0438
OIN	0.1426**					0.0871
	-0.0566					-0.0696
INQ		−0.0045***				−0.0012
		-0.0005				-0.0017
HEL			−0.6739***			−0.2958
			-0.0979			-0.2202
FDI				−0.1704***		0.5320***
				-0.0459		-0.0979
FII					−0.1860***	
					-0.0452	
α	0.0108	−0.0020	−0.0015	0.0094	0.009	0.0033
	-0.0142	-0.0136	-0.0136	-0.0137	-0.0138	-0.0166
γ	0.5101***	0.4770***	0.4845***	0.4966***	0.4951***	0.4750***
	-0.0211	-0.0211	-0.0209	-0.021	-0.0211	-0.024
δ	0.4570***	0.3832***	0.4019***	0.4382***	0.4397***	0.3449***
	-0.0426	-0.0402	-0.041	-0.0425	-0.0427	-0.0404
λ0	−5.4617***	−5.1604***	−2.4101***	−4.9047***	−4.8761***	−0.1527
	-0.4403	-0.3434	-0.5156	-0.3681	-0.3701	-1.0911
Obs.	5,812	5,989	5,989	5,812	5,812	5,635

Before the pandemic, the media and the internet were the principal sources of pandemic information. However, in addition to established news channels, social media is increasingly used to disseminate information. The majority of fake news is spread via social media, and people always form their own opinions on the situation. We may not be able to read all of the information and make sensible judgments because so much misinformation is shared to individuals and us .

Thus, it is critical to use many sources of information to receive actual news. The source of information should be thoroughly examine before responding to the current news. Companies, in particular, may play a vital role in avoiding uncertainty by delivering timely, accurate, and trustworthy information to key stakeholders. As a result, successful crisis management necessitates clear communication at all company levels and a quick grasp of the present situation. To minimize misunderstandings about local companies and boost customer service, companies must also present consumers with up-to-date information about company status (open/closed), business hours, and online/delivery choices. Information concerning the health and safety of staff and consumers must also be disclosed. The ILO also highlights the need for accurate, timely, and transparent information in avoiding and controlling epidemics, and lowering fear and distrust in all areas of the economy and society, including the workplace. Consumer confidence that is eroding or non-existent will negatively influence consumer spending and company investment, stalling and impeding recovery (Lindsey et al., 2020).

Robustness tests

Segmentation and sample interaction were employed to examine the advantages of industrialized and emerging nation linkages. Table 7 presents the findings of the interaction conditions analysis, and Table 8 compares between developed and developing nations. We investigated the relationship between the overall resilience score (RES) and the various components of macroeconomic country characteristics. The purpose of these interaction items is first to determine the coupling effect and then determine the macroeconomic characteristics at the national level. The goal is to determine whether fluctuations in conditions can be reduced under uncertain circumstances (such as the COVID-19 pandemic). We explored the expected signals and statistical significance of various interaction terms, as shown in Table 6. The relationship between resilience index (RES) and capitalism index (CPS), governance index (COG) and economic scale (LGD), productivity index (PRO), and infrastructure quality (IN) are all negative, similar to the table The previous result 4 is. The relationship between resilience index (RES) and health pillar (HEL), financial growth index (even FDI is negative) and financial institution growth index (FII). This shows that in the context of a country's resilience, these characteristics can help reduce stock market volatility. CPS (0.9090), COG (0.0107), and INQ (-0.7688) are only statistically significant at the 10% level. The combined effect of RES*MPR and RES*OIN is also significant at the 5% level in columns (3) and (6), but the signal is positive. During COVID-19, countries with high political participation and oil consumption may experience larger inventory adjustments than markets with similar resistance levels.

Table 8: Sub-component and Resilience Index Interaction

	(1)	(2)	(3)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Variables	Process of Conditional Variances									
CTC	3.7193***	3.7974***	3.7677***	3.8832***	3.8516***	4.0457***	3.8478***	3.8942***	3.8692***	3.8432***
	-0.5355	-0.5327	-0.5338	-0.5305	-0.5312	-0.5358	-0.5306	-0.5299	-0.5378	-0.5379
CTD	3.8358***	3.5327***	3.3764***	3.1637***	3.3034***	2.6755***	3.1768***	3.1208***	2.9979***	3.0018***
	-0.3793	-0.3783	-0.3788	-0.3778	-0.3785	-0.384	-0.3785	-0.3778	-0.3834	-0.3835
CSC	0.1567***	0.1415***	0.1339***	0.1264***	0.1179***	0.1241***	0.1228***	0.1198***	0.1164***	0.1173***
	-0.0332	-0.0314	-0.0313	-0.0309	-0.0315	-0.0369	-0.0308	-0.032	-0.0314	-0.0308
CSD	0.0855**	0.1124***	0.1266***	0.1383***	0.1474***	0.1417***	0.1385***	0.1468***	0.1527***	0.1526***
	-0.0418	-0.0396	-0.038	-0.0387	-0.0394	-0.0447	-0.0388	-0.0389	-0.0395	-0.0388
RES	3.9868***	−0.0025	−0.1298***	−0.0358	0.2974**	−1.8249**	−3.2884***	−0.8539	0.0705*	−0.0479
	-1.0395	-0.5825	-0.0363	-0.0311	-0.1894	-0.9078	-0.7705	-2.1232	-0.109	-0.1138
\CPS	2.9999***									
	-1.0332									
RES*CPS	−0.9090***									
	-0.2471									
COG		−0.2958**								
		-0.5627								
RES*COG		−0.0107*								
		-0.1365								

MPR			0.0293							
			-0.0255							
RES*MPR			0.0116*							
			-0.0066							
LGD				0.0036						
				-0.0098						
RES*LGD				−0.0005						
				-0.0014						
PRO					0.0598					
					-0.2352					
RES*PRO					−0.0438					
					-0.0575					
OIN						−1.8074**				
						-0.9017				
RES*OIN						0.4177**				
						-0.2103				
INQ							−3.2103***			
							-0.7469			
RES*INQ							−0.7688***			
							-0.1796			
HEL								−1.0224		
								-1.9835		
RES*HEL								−0.1968		
								-0.4873		
FDI									1.4210*	
									-0.7647	
RES*FDI									−0.2926	
									-0.1804	
FII										0.9174
										-0.7389
RES*FII										−0.1481
										-0.1755
α	−0.0176	−0.0154	−0.0077	−0.0092	−0.0119	0.0025	−0.0125	−0.0103	0.0042	0.005
	-0.0149	-0.0152	-0.0142	-0.0145	-0.0141	-0.0146	-0.014	-0.0141	-0.0147	-0.0145
γ	0.4517***	0.4597***	0.4678***	0.4724***	0.4685***	0.4917***	0.4717***	0.4733***	0.4810***	0.4828***
	-0.0223	-0.0225	-0.0213	-0.0215	-0.0214	-0.0218	-0.0211	-0.0211	-0.0216	-0.0216
δ	0.3320***	0.3610***	0.3619***	0.3879***	0.3725***	0.4228***	0.3801***	0.3902***	0.4063***	0.4049***
	-0.0427	-0.0435	-0.0439	-0.0445	-0.0439	-0.0464	-0.0442	-0.0448	-0.0456	-0.0456
λ0	−19.2976***	−4.6917*	−5.1780***	−5.3872***	−6.5106***	2.6809	8.0966***	−1.0744	−5.7678***	−5.3642***
	-4.418	-2.4051	-0.385	-0.4112	-0.842	-3.8632	-3.1237	-8.6434	-0.6197	-0.62
Observations	5,989	5,989	5,989	5,989	5,989	5,812	5,989	5,989	5,812	5,812

*Note: ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.*

Table 9: The impact of market elasticity of advanced companies compared with small companies

Var	Process of Conditional Variances		
CTC	4.0330***	3.8783***	3.7916***
	-0.7299	-0.7376	-0.7704
EMG * CTC	0.1721	0.2757	−0.0018
	-0.9719	-0.9789	-1.0223
CTD	4.8344***	5.4064***	6.4624***
	-0.5288	-0.531	-0.5512
EMG * CTD	−2.7840***	−3.2286***	−3.8241***
	-0.7512	-0.7552	-0.7887
CSC	−0.1642***	−0.1146***	−0.0957*
	-0.0414	-0.0414	-0.0574
EMG * CSC	0.6134***	0.5987***	0.6112***
	-0.0704	-0.0712	-0.0958
CSD	0.4878***	0.4184***	0.3747***
	-0.0523	-0.0523	-0.0688
EMG * CSD	−0.6573***	−0.6566***	−0.6339***
	-0.089	-0.0904	-0.1187
EMG	0.1396***	−3.0079***	−2.2836
	-0.0313	-0.6113	-4.6431
RES		−1.1023***	

		-0.1329	
EMG * RES		0.6472***	
		-0.1382	
CPS			−0.5277**
			-0.2645
EMG*CPS			0.2399
			-0.3467
COG			−0.0278
			-0.1528
EMG*COG			−0.6428***
			-0.1908
MPR			−0.0693
			-0.0629
EMG * MPR			0.0933
			-0.0635
LGD			0.1127***
			-0.0213
EMG * LGD			−0.3263***
			-0.0346
PRO			−0.2977**
			-0.1376
EMG*PRO			−0.1494
			-0.1757
OIN			0.3478***
			-0.1187
EMG * OIN			−0.0164
			-0.2415
INQ			−0.0028
			-0.0035
EMG*INQ			0.5438
			-0.3879
HEL			0.0376
			-0.9192
EMG * HEL			0.5015
			-0.9568
FDI			−0.8956***
			-0.1789
EMG * FDI			2.3224***
			-0.2772
α	0.0001	−0.0167	−0.0115
	-0.0137	-0.0154	-0.0178
γ	0.4778***	0.4605***	0.4361***
	-0.0214	-0.0227	-0.0258
δ	0.3449***	0.3121***	0.2298***
	-0.0376	-0.0369	-0.0372
λ0	−5.9239***	−1.2724**	−4.8608

	-0.3279	-0.5841	-4.0842
Observations	5,988	5,989	5,636

Note: The elasticity of the sample nations stated in Table 2 in mature and developing markets, as well as the influence of other macroeconomic factors, are compared in this table. The results in this table are based on the emerging market stack's interaction circumstances. COVID-19 data is in the first column, resistance values are in the second column, and all variables are in the third column except the Financial Institution Growth Index (FII), which is included in the FDI Composite Index. (2) and (3) involve a rise in COVID-19 cases and fatalities both globally and locally (3). In parenthesis, common mistakes are highlighted. Statistical significance is indicated by ***, **, and * at the 1%, 5%, and 10% levels, respectively.

Discussion

Another key strategy is to keep operations going as long as feasible while taking all required precautions to avoid illness transmission. This will assist many struggling SMEs in surviving while also reviving the economy. Furthermore, the United Nation Development Programme (UNDP) demands that the government and business leaders guarantee that the blockade has no negative impact on commerce, including temporary limits on citizens' freedom of movement, and that "product and service borders must be maintained open." This is critical for Pakistan. Importantly, its debt-to-GDP ratio has been rising due to currency devaluation.

Many companies, including restaurants, fast-food restaurants, bakeries, grocery shops, and shopping malls, must prioritize online home delivery orders to avoid economic losses and preserve social distance as much as possible. Affiliated businesses can take advantage of this possibility. Community institutions can give food to help COVID-19 health and community workers survive the current epidemic. In China, for example, there are various Chinese meal-ordering apps, such as Meituan and Ele.me. To overcome and relieve the business difficulty, several food firms, including Wal-Mart, have provided quick delivery services. The purchase is made by phone, WhatsApp, or other conventional applications because Pakistan does not have a central application for internet orders. Some service providers may want to expand their offerings to include on-site services. Some qualified temporary employees, such as engineers, may, for example, try to supplement their income by providing housekeeping services. Motorbike technicians who were impacted by the plant shutdown extended their company by performing motorcycle repairs at home (Chuan et al., 2021). Although all house repairs and maintenance may not be done without traveling to the store, many small repairs and upkeep can.

Online trading allows small enterprises to conduct business without visiting a physical location. For example, in China, WeChat and Alipay, the two most popular social media platforms, account for most small company transactions. In theory, neither the sender nor the receiver will be charged for using these apps. Incentives should be offered to encourage local individuals and companies to embrace electronic banking in addition to lowering electronic transportation charges. Because only a small percentage of Pakistanis utilize internet banking, increasing public knowledge of the service is necessary. This allows businesses to cut expenses while also speeding up operations.

Given that 67.93% of enterprises face financial difficulties, the government should consider providing loans to these enterprises to help them tide over the crisis. Many businesses may not be able to weather the present economic storm without government assistance. Businesses affected by COVID-19 may be eligible for disaster assistance loans from local, provincial, and federal governments. These loans might be comparable to those given out in the aftermath of other unforeseeable calamities, such as earthquakes, floods, and other big tragedies, to help businesses

better withstand disease-related financial disruptions. Low-interest loans with an extended payback duration might be employed to collect payments. Increased credit lines for small enterprises are also required. Due to the increased promise of low-interest auxiliary loans, small firms may have high ambitions during the present financial crisis. You can also lessen the strain by deferring payments for an extended time. The central banks of Australia, Canada, New Zealand, the United Kingdom, and the United States are all comparable. "Italy has prolonged the mortgage payback time," according to the ILO. Although low-interest loans might help businesses thrive, Senz believes that many individuals are hesitant to apply because they distrust the government and afraid of the funding. According to another survey, many businesses are hesitant to request assistance owing to administrative challenges, application load, and applicability issues (Gaglione et al., 2020). As a result, technical expertise is necessary to overcome impediments to getting public financing.

Many employees will be able to keep butter and bread on their tables because to media outsourcing. Many governments have taken similar steps to boost economic development and assist small enterprises to weather the storm. For small company loans and overdrafts, the United Kingdom, for example, has set an 80% loan ratio. Many businesses have already begun laying off employees. Employees who do not fulfill their responsibilities for lengthy periods are more likely to be fired and their wages/salaries stopped by other firms. If this is the case, the government should consider paying unemployment compensation to persons who have lost their jobs or had to file for bankruptcy due to COVID-19 or work stoppages. Many nations have put in place mechanisms like the Philippine Social Security System, which pays unemployment compensation to 30,000 to 60,000 persons who would lose their jobs as a result of closures or layoffs (Yarovaya et al., 2021). Because many small company owners do not own the firms they run, they must continue to pay rent even if they close their doors, putting them under financial strain. Therefore, homeowners may be recommended to reduce or postpone business rentals for at least three to four months following the implementation of the lock-in. China has also taken steps to assist small and medium-sized businesses in dealing with the present economic downturn. Small enterprises can also be helped by local governments subsidizing utilities like power, water, and natural gas. It can also cancel or lower highway tolls, easing transportation corporations' financial burden.

Small firms may boost their resilience in a variety of ways. However, psychological preparedness for supply chain disruption, learning from past failures, and the development of many forms of social capital are the most significant variables. Continuously assessing the situation and paying great attention to any disruptions is part of cognitive preparedness. This enables the organization to swiftly identify and strengthen supply chain vulnerabilities, resulting in increased resilience. To create resilience, it is also necessary to learn from your mistakes. Companies may also take advantage of social capital or network relationships to gain limited resources and increase information transmission efficiency (Lawal, 2021).

In times of crisis, employee relations are frequently viewed as a vital component of corporate success (Gbandi and Amissah, 2014; Ikram et al., 2019; Syriopoulos, 2020). Positive social interactions, trust, and staff happiness have all been shown to help businesses boost productivity and recover from research disasters. For example, Southwest Airlines' emphasis on creating trust and working relationships with workers and corporate culture was one of the key reasons the airline survived September 11, 2001, terrorist assault (Gittell et al., 2006). Companies should prioritize maintaining excellent social interactions with employees instead of contemplating short-term layoffs, compensation reduction, and other employee perks (Brooker, 2001). This motivates employees to work hard by making them feel loyal and comfortable at work. Furthermore,

COVID-19 has created a great deal of ambiguity. The majority of COVID-19's physical symptoms are apparent, but they may or may not show after 14 days, making it difficult to predict whether employees will continue to work. Even if the outbreak is under control and no new cases are recorded, the risk remains. Because specialists still do not believe in the virus six months later. Employee collaboration, mutual trust, and positive relationships boost efficiency by creating stability and loyalty (Chen, 2019; Pedauga et al., 2021; Singh et al., 2020)

Conclusion and Policy Implications

In Pakistan, SMEs account for around 90% of all domestic businesses and contribute 40% of Pakistan's GDP and 40% of export earnings (*, **, and *). Pakistani media are studying the impact of the COVID-19 epidemic to enable policymakers and practitioners to understand better how to support these businesses in times of crisis. Our findings suggest that the media faces several challenges due to the present epidemic. To our best our knowledge, this is the only research that collects data on the influence of the COVID-19 epidemic on Pakistani media, and it is also one of the few businesses in the world that does so. Policymakers and professionals are studying the impact of the COVID-19 outbreak on Pakistani media is being studied by to service these enterprises in times of disaster better. Based on the research findings, a set of policy recommendations to help SMEs are made. Economic growth, income, and employment assistance SMEs, planning, resilience building, and good social ties are all part of this. Our survey results and policy recommendations will benefit policymakers interested in assisting small firms, and SME owners and managers who want to help operate their enterprises under challenging times. Our political beliefs alone will not be enough to help the media get through the current crisis, but they can go a long way toward alleviating the pain of these businesses. Even though our study has major theoretical and practical implications for the impact of COVID-19 on SMEs, there are still several shortcomings that need to be addressed. Our study's sample size is insufficient to represent other businesses fully. Thus, future studies should include industry representatives in the sample size. COVID-19 has introduced new difficulties to employee and consumer health and safety, as well as a new corporate culture in the workplace, in addition to social and economic consequences. Therefore, future studies may look at these concerns to understand better how the present epidemic is affecting businesses.

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