

Chapter 4

Business Continuity in COVID-19 Pandemic: A Global Review



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4.1 Introduction

The global forces, pressures, and pandemics are continuously demanding to the firms to ensure the continuity of their businesses, thus business continuity has become an interesting matter to overcome the negative impact of global epidemics (KPMG, 2006). There is a management process that considers the continuous functions and operations of the business. The continuity of firm business operations is critical for the survival of an enterprise in the condition of a global crisis because of the risk factors of a global pandemic like COVID-19 (Randeree et al., 2012). An approach that confirms the business continuity plan (BCP) is known as business continuity management (BCM).

BCM is a strategy to make certain the capabilities of the business to execute its functions in a virulent disease like coronavirus (COVID-19). The epidemic of COVID-19 has disrupted business throughout the world by crashing the global economy. All categories of business corporations including small and medium enterprises (SMEs) have to deal with different types of issues in their continuity of business functions (Merchant et al., 2018). The global economy principally reports issues about trade, demand, and supply of products and services in global markets to achieve business orders of dedicated customers in time (Sikich, 2018).

BCM (Gibb & Buchanan, 2006) is a tool that may be applied to provide a high level of confidence to the business firm and business community about the business continuity process and services that should be delivered by proper BCP (Pheng et al., 2010) that can play an important role for the creditability of firm even in the timing of a global pandemic like COVID-19.

The circumstances of the COVID-19 circumstances that businesses are facing the substantial impact of the global pandemic outbreak. Business organizations are

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reliant upon smooth continuity of their business operations in normal and especially in epidemic days to satisfy their customers with an appropriate channel of demand and supply of mandatory products and services (Koonin, 2020).

The products and services of any business are the sustenance for business continuity that has been influenced globally by the outbreak of coronavirus (COVID-19). The recent reports of the United Nations Conferences on Trade and Development (UNCTD). Zhan (2020) considers the business continuity process of every type of economy including developed economies like the USA and China (Oldekop et al., 2020) and developing economies like Pakistan and India (Djankov & Panizza, 2020). International Chamber of Commerce (ICC) provides guidelines for business continuity that are being reviewed in detail in the next section of this chapter (Alao & Gbolagade, 2020).

Figure 4.1 is communicated by ICC in its published guideline-based report. This picture indicates the impact of COVID-19 on business continuity. This figure also declares how COVID-19 restricts the customers to approach the business corporation for products and services, etc. The above picture of ICC has a good point too that every official member of a business firm may perform his duties online and every customer can order any available item with the help of technology.

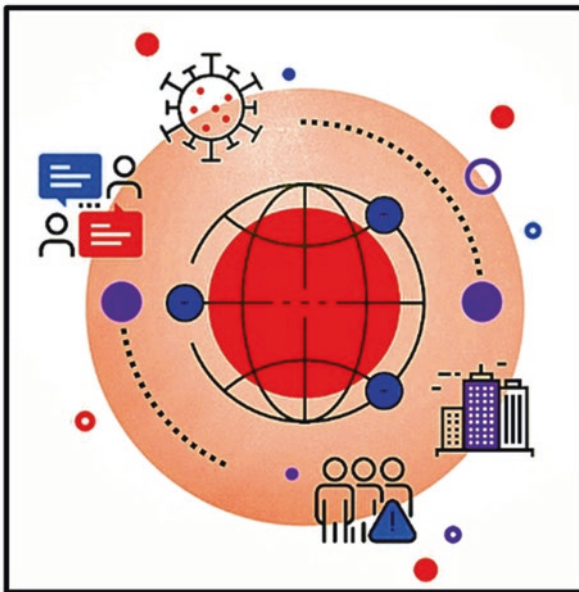


Fig. 4.1 Impact of coronavirus on the global business markets. (Source: <https://iccwbo.org/publication/covid-19-business-continuity-guide/>)

4.1.1 Objectives

This chapter has been written to fulfill the following key objectives:

1. To illustrate the economic consequences of the COVID-19 pandemic in global business markets.
2. To explain the principles of the ICC about business continuity management in the COVID-19 situation.
3. To describe the business issues of globally developed economies in the COVID-19 pandemic.
4. To describe the issues of developing economies in the business continuity in COVID-19 pandemic.

4.1.2 ICC Principles for Business Continuity Management in COVID-19: PAMA

Business continuity plays a significant role for the global economy in pandemic diseases like COVID-19, but this is not an effortless task to perform business operations in the epidemic for the firm management and employees in the public market to facilitate the customers at a possible level. Meanwhile, a proper route map is needed for the continuity of business operations even in global pandemic such as COVID-19. ICC takes an initiative in this regard by providing guidelines to the business community. These guidelines are known as PAMA principles including Plan, Adapt, Monitor, Assess.

PLAN will insure less disturbance and more flexibility in your business continuity according to the pandemic.

Figure 4.2 is extracted from the shared report of ICC about business continuity in COVID-19. This figure shows the first principle of ICC know as plan. Figure 4.2 states the important points about the plan.

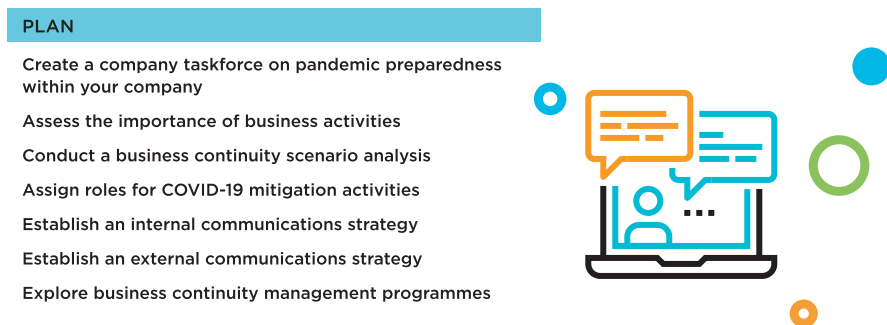


Fig. 4.2 The first principle of ICC: plan. (Source: <https://iccwbo.org/publication/covid-19-business-continuity-guide/>)

1. Plan to create the task force to prepare its employees for an epidemic situation.
2. Plan to continue the business operations in an epidemic condition.
3. Plan to conduct business continuity analysis.
4. Plan to conduct internal and external communication in an epidemic situation.
5. Plan to explore a business continuity management program in an epidemic condition.

ADAPT is essential for operations of the business to ensure step-by-step business continuity after the settlement of the desired plan.

Figure 4.3 is extracted from the shared report of ICC about business continuity in COVID-19. This figure shows the second principle of ICC know as adapt. Figure 4.3 states the important points about adapt.

1. Adapt to protect your taskforce in COVID-19.
2. Adapt to finalize home-based working mechanism in COVID-19.
3. Adapt to maintain cash and capital in COVID-19.
4. Adapt to monitor demand and supply risk in COVID-19.
5. Adapt to select an appropriate business location in COVID-19.

MONITOR means that after the development of a suitable plan and adapt for business continuity, the responsibility of the business management is to monitor every aspect of government support for your business and employees to perform the business operations in a pandemic situation.

Figure 4.4 is extracted from the shared report of ICC about business continuity in COVID-19. This figure shows the third principle of ICC know as monitor. Figure 4.4 states the important points about monitor.

1. Monitor the pandemic situation to observe the service change.
2. Monitor the availability of transportation for employees and customers in pandemic conditions.
3. Monitor the fruitful suggestion about business continuity in the pandemic situation.
4. Monitor the announcement of the government grant for business in pandemic condition.

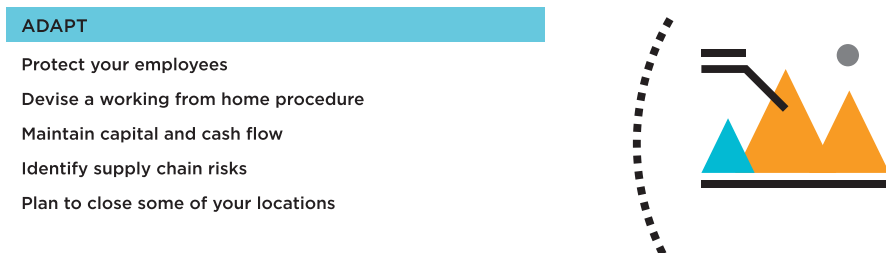


Fig. 4.3 The second principle of ICC: adapt. (Source: <https://iccwbo.org/publication/covid-19-business-continuity-guide>)

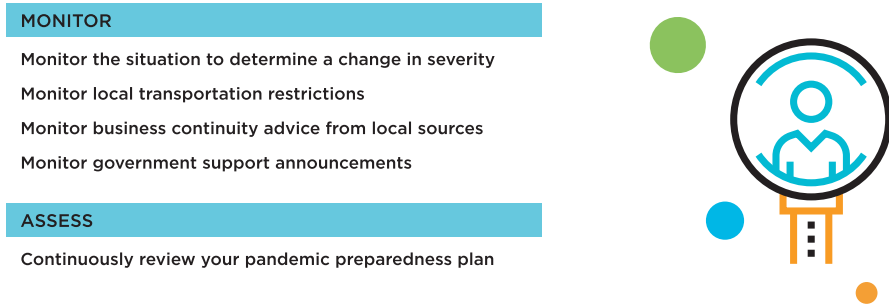


Fig. 4.4 The third and the fourth Principles of ICC: monitor and assess. (Source: <https://iccwbo.org/publication/covid-19-business-continuity-guide>)

ASSESS covers the surety of your COVID-19 plan, adapt, and monitoring process on the necessary basis for the betterment of your business operations in such a pandemic.

Figure 4.4 is extracted from the shared report of ICC about business continuity in COVID-19. This figure shows the fourth principle of ICC know as assess. Figure 4.4 states the important points about assess.

1. Assess to review the above-stated principles especially whether the prepared plan is being adopted and monitored or not.

4.2 Literature Review/Background

All economies of the world have to face the COVID-19 pandemic outbreak regardless of a developed or developing economy (Maria et al., 2020). The stock markets of the USA, China, Pakistan, and India have experienced disturbance especially in planning for business continuity in a pandemic situation.

If we assume that the COVID-19 does not lead to even crush the financial systems by stabilization of growth with developed business continuity process for well-established business due to proper application of global technology financial system, issues still stand same as before for in-process business continuity to shift on the technological business process (Ostapets et al., 2020).

The globally strong economies such as the USA has already been shifted to advance business continuity management because of well planning and availability of the best technology. The USA is being recovered even after hard shocks of the COVID-19 pandemic, but still, the situation is uncertain because cases are being reported due to the second wave of COVID-19 as compared to the first shift of COVID-19 in the world (Fig. 4.5).

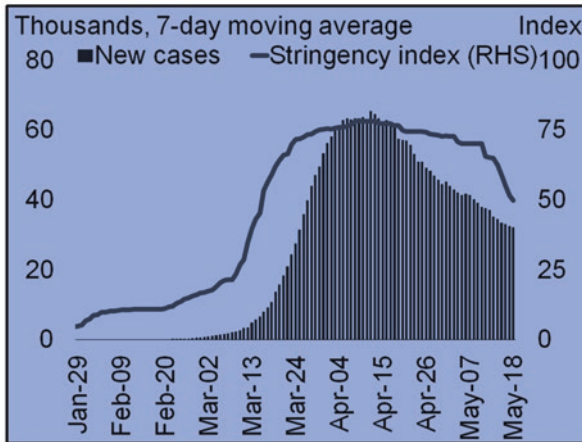


Fig. 4.5 Weekly reporting cases in the USA: 7-DMA. (Source: <https://www.worldbank.org/en/publication/global-economic-prospects>)

The foreign policy experts of the United States including Kissinger (2020) state that the COVID-19 pandemic outbreak for business financial operations is different from the financial crisis of 2008, the reason is that coronavirus threatens to “set the world on fire and disrupt the global economic order” while to differentiate COVID-19 from that financial crisis in 2008, different important technological ways so far have been introduced and being adopted to cover-up despite a global pandemic known as COVID-19 discontinues the business operations among major and minor economies all over the world (Schindler et al., 2020).

Figure 4.5 shows COVID-19 cases that were being reported in the USA. The 7 days moving average method is adopted to present several patients with coronavirus. This chart-based picture shows the start of the first wave of COVID-19 from China on December 2019 and then the spread of an epidemic all over the world including the USA in January 2020.

The population of the USA observes the symptoms of coronavirus in the year 2020; in January, the reporting cases rate was a little bit slow, and this rate was being high from February to March 2020. Figure 4.5 shows the peak of reported cases in April 2020 but with a good indication, high reporting ratio went low down after April onwards as per sample population and random days after stricken follow-up of SOPs.

4.2.1 Global Review

The influence of COVID-19 on the global economy can be verified from lockdown situations around the world especially restrictions on labor mobility, ban to travel, and most important shutting down of business operations and slowdown in economic continuity.

Coronavirus (COVID-19) was declared as a global pandemic by the World Health Organization (WHO) in December 2019, and the first wave was confirmed between February and March 2020 all over the world (Economics, 2020). Coronavirus mostly reflected the GDP growth by 2.3–4.8% (Park et al., 2020), and COVID-19 may cause the Foreign Direct Investment (FDI) by 5–15% shrinking (Jaworek et al., 2020).

Meanwhile, according to the recent reports of ILO (International Labour Organization), 25 M people around the world could go unemployed (Khanna, 2020). COVID-19 will have more impact in developing countries as compared to developed countries of the world, which will be too much difficult for developing economies to plan effective business continuity plan in a limited time and unlimited constraints (Valensisi, 2020).

Furthermore, constraints may be like a poor health system, imbalance in trade, the high burden of international debt, and unstable capital flow (Bangladesh Bank, 2004). This is being expected for a high rate of unemployment and inflation in developing economies while this is quite clear that the situation may go worse due to \$220B income losses in developing countries according to United Nation Development Program (UNDP) (Mission, 2020).

This chapter considers case studies of the USA and China as globally developed economies while covers Pakistan and India as developing economies of the world to discuss the background and global literature review regarding business continuity in COVID-19.

4.2.1.1 The USA

The outbreak of the COVID-19 pandemic in the USA has collapsed the activity level of production and service sectors unprecedentedly as compared to the global financial crisis before the pandemic of coronavirus while in the United States, unemployment is being raised every week, as well as business continuity for sale and purchase of consumer products has fallen very quickly in such a global pandemic along with prices of oil in the USA, and the global oil market has put an impact on investment pattern for business continuity of oil sectors in the world including the USA (Figs. 4.6, 4.7, and 4.8).

Figure 4.6 shows the reduction of workers, a reduction in working hours of laborers and taskforce respectively in different departments that provide regular services on the spot, mainly beauty and personal care, food and beverage, entertainment, and professional services department. While, as we know that COVID-19

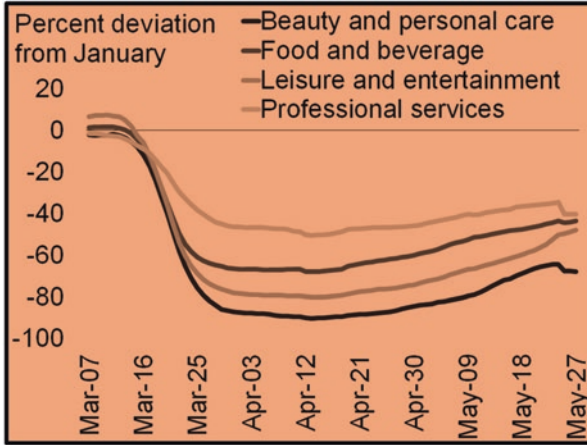


Fig. 4.6 Reduction of labor in the USA in different sectors. (Source: <https://www.worldbank.org/en/publication/global-economic-prospects>)

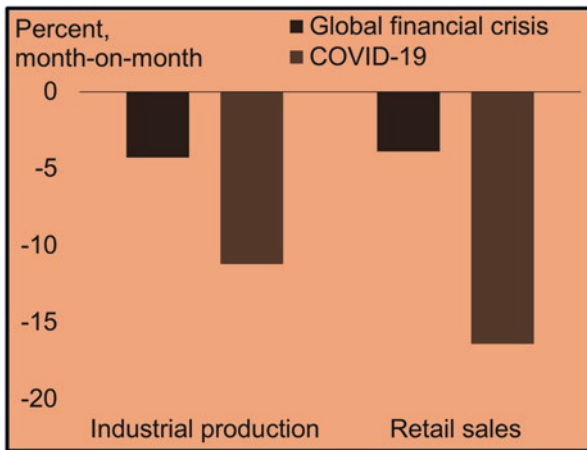


Fig. 4.7 Comparison of financial crises and COVID-19 with production and sales of the USA. (Source: <https://www.worldbank.org/en/publication/global-economic-prospects>)

affected the population of the USA from January 2020 after reporting of cases in China from December 2019.

The cases of COVID-19 are reported in the USA with symptoms the public and service providers limit themselves at home for isolation and go outside even with no presence at the workplace (Fig. 4.6). The observations are available in the above figures collected from four different departments where people go the most even in a hard time. Figure 4.6 confirms the reduction of the taskforce available in the sample four sectors from January 2020 to May 2020, which indicates that almost

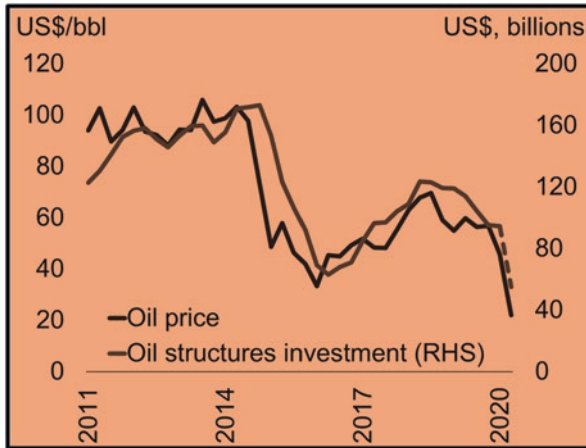


Fig. 4.8 Comparison of oil prices and investment in oil structure of the USA. (Source: <https://www.worldbank.org/en/publication/global-economic-prospects>)

20%–80% of laborers decide to rest at home rather than to go for the work is such an epidemic situation.

Figure 4.7 presents a comparison of the effects of global financial crises especially about FC-2008 and COVID-2019. To compare the effects of FC-2008 and COVID-2019, the sample data is taken for industrial production and then retail sales of the USA. Figure 4.7 indicates that industrial production of the USA decreased by 1–4% in FC-2008 while retail sales deducted at the same rate in FC-2008. Furthermore, the figure states the interesting story about the effects of COVID-19 on industrial production and retail sales in the USA. Figure 4.7 shows approximately 1–12% reduction in industrial production while 1–16% decrease in retail sales in the USA. In short, this comparison presses the bell of danger for the global economy including the USA till COVID-19 is going on.

Figure 4.8 presents the comparative effect of COVID-19 on oil prices and investment in oil sectors of the USA. This analysis indicates that there is a high rate of investment in the oil sector from 2011 to 2018 with a zigzag position of oil prices, but unfortunately, as COVID-19 affects the global economy, the prices of oil and its investment go down in 2019–2020.

The financial reserve of the USA is being reduced and almost near to ZERO while suitable measures have been taken for recovery to stabilize the financial system for continuity of business which is being operated inside or outside the boundaries of the USA with the direct and indirect association toward global economic phenomena under the consequences of COVID-19.

The government of the United States provides \$3 trillion for economic recovery by business continuity management while including \$1 trillion for business debt but the expected GDP is 6.1% in 2020 due to the first wave of COVID-19 as a global pandemic by the World Health Organization (WHO).

4.2.1.2 China

The economic outlook by the World Bank in COVID-19 for China states that private consumptions and nonfinancial services to the customers for the business continuity management have been hardly hit by such global pandemic, imbalance in trade due to fewer exports as compared to import, as a result of discontinuity of factories while business operations are being normalized gradually in terms of regular business continuity online process with the help of technology in Chinese markets.

However, Chinese business firms have to face discontinuity in demand and supply chain management to deliver the products and to offer the services in the local and global market (Fig. 4.9) (Bangladesh Bank, 2004).

For comparison and to check the after-shocks of COVID-19 on China’s industrial business, Government’s revenues, and its profits. Data is extracted from a 100 index for the period of 1 year from January–April 2019 to January–April 2020. Figure 4.9 analyzes that profits and revenues of the Chinese industry and government were 100 indexes before the novel of COVID-19 (January–April 2019) but as the sample period near toward the spread of coronavirus in August–December 2019, the profits and revenues dropdown up to 80 from an index of 100. As the cases ratio increase and the epidemic goes out of control globally index of 100 declines 10–15 index more in January–April and reports roundabout 70 for profits at the end of the sample period but revenues of the government show betterment because of effective policies and saving of resources for future.

The government of China has followed the best fiscal and monetary policies to cover up the hurdles of the COVID-19 pandemic outbreak by providing liquidity back-up for business continuity in new or expansion in old ones, tax relief, a grant

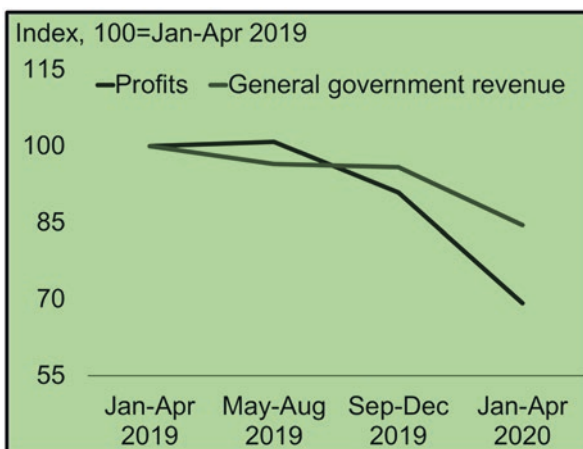


Fig. 4.9 Industrial profits and government revenues of China in COVID-19. (Source: <https://www.worldbank.org/en/publication/global-economic-prospects>)

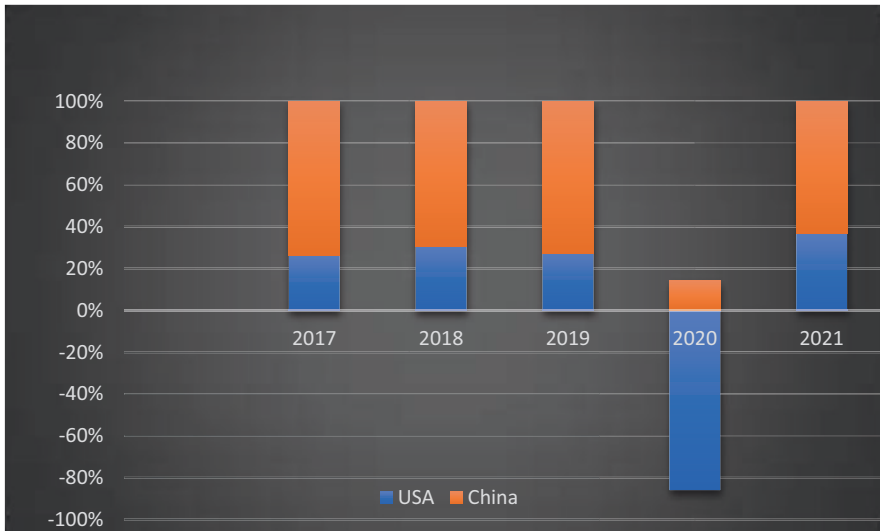


Fig. 4.10 GDP analysis from 2017 to 2021 of the USA and China in percentage. (Source: <https://www.worldbank.org/en/publication/global-economic-prospects>)

of 2.8% of GDP for health and other welfare and issuance of local, central, and special bonds at the rate of 2.6% of GDP (Sarmadi et al., 2020).

Furthermore, in a comprehensive economic analysis by the business experts of the world, considering the major hurdles of COVID-19 global pandemic, the growth of China is expected to be at the rate of 6.9% for 2020–2021 but depends on recovery from such pandemic in time because of, wave after wave of COVID-19 in all over the world over time (Fig. 4.10).

For this purpose, data is extracted from the website of World Bank from 2017 to 2021.¹ Figure 4.10 shows a better economic position in terms of GPA% from 2017 to 2019 but as per the rapid increase in reported cases of a novel coronavirus in 2019–2020, the GDP of both sample countries decline with a bad indication while interestingly GDP of China is better with +10%. The USA's GDP went in the worst position by declining by almost 80% as compared to China's GDP. According to the report of World Bank for 2020–2021, improvement is being expected as per policies and approval of incentives for stock markets of sample countries (Fig. 4.10).

4.2.1.3 Pakistan

The outbreak of the COVID-19 pandemic has affected the global economies including Pakistan. Many business organizations of Pakistan have to face a variety of issues such as disruption in demand and supply chain, imbalance in exports and

¹GDP in 2021 is expectedly for future prediction.

imports of business products due to cancelations of local and international trade orders (Asghar et al., 2020).

The above-stated situation indicates that business firms of Pakistan are experiencing the significant impact of coronavirus (COVID-19) disease on business operations continuity. Pakistan's business stakeholders accept that SMBEP (Small and Medium Business Enterprises of Pakistan) are major victims of such a global pandemic due to lockdown in Pakistan for 2–6 months with limited continuity of business operations (Shafi et al., 2020).

SMBEP is the backbone of the economy of Pakistan because there is too much unemployment in Pakistan, and this SMBEP provides job opportunities as a 40% contribution to GDP with 40% earning from exports of Pakistan (Bangladesh Bank, 2004).

According to the Finance and Statistics department of Pakistan, the Finance sector provides 1.50% of job opportunities. The electricity and gas sector provide 2.00%, the education sector provides 3.30%, and the health department provides 19.60% job opportunities for the public of Pakistan (Fig. 4.11).

Data and information are presented in Fig. 4.11 that most of the Pakistani population works in the agriculture department at the rate of 87.80% and almost 70% of people are associated with trading activities while so on. The purpose of such a presentation is to testify the unemployment rate in Pakistan. The public of Pakistan is losing their working/job opportunities day by day due to the outbreak of the COVID-19 pandemic at the national and international levels.

In the last week of December 2019, pandemic disease cases were being reported, and after that WHO proved with reasons, because of a global pandemic due to the

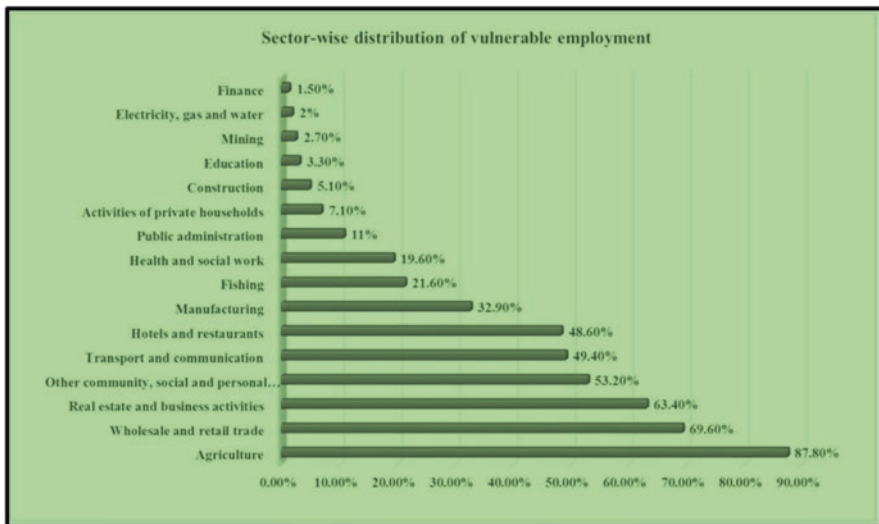


Fig. 4.11 The sector-wise employment rate in Pakistan. (Source: www.google.com & employment trend report by Sohail (2019))

coronavirus (COVID-19). WHO confirmed the alarming situation and declared PHE (Public Health Emergency) in January 2020 (Chatterjee et al., 2020).

In Pakistan, the cases of COVID-19 were reported and confirmed in February–March 2020 and so on, then there was an announcement of full lockdown for every sector while thereafter, on the demand of the business community of Pakistan demanded limited or smart lockdown by considering business continuity in Pakistan’s markets (Fig. 4.12).

The first quarter of 2020 reported almost 43% of cases in Sindh province that was a high rate among the reporting cases in Pakistan. Gilgit (GB) and Kashmir (AJK) show a very low rate of reporting cases with around about 1.8% and 1.9% respectively. Figure 4.12 also confirms 34% of cases of COVID-19 in Punjab province, 32% in Khyber (KPK), and 12% in Balouchistan province of Pakistan accordingly.

Pakistan is a developing economy of the world and has been reported that Pakistan lost one third of its revenues and 50% decrease in its exports due to a lockdown situation to control the spread of the COVID-19 pandemic (Shafi et al., 2020). Financial analysts and the World Bank warn Pakistan about the recession period for business activities due to lockdown strategies in the COVID-19 pandemic (PSDP, 2020).

The real GDP growth of Pakistan for the FY2020 is expected to shrink by 1.3% as per the World Bank reports in COVID-19 for developing economies (World Bank, 2020b). The effect of complete and partial (smart) lockdown in Pakistan especially for business continuity in online as well as physical terms (Hussain, 2020).

Pakistan’s textile, manufacturing, food, beverage, the tobacco industry, and other sub-sectors associated with these industries have to face and still are facing a

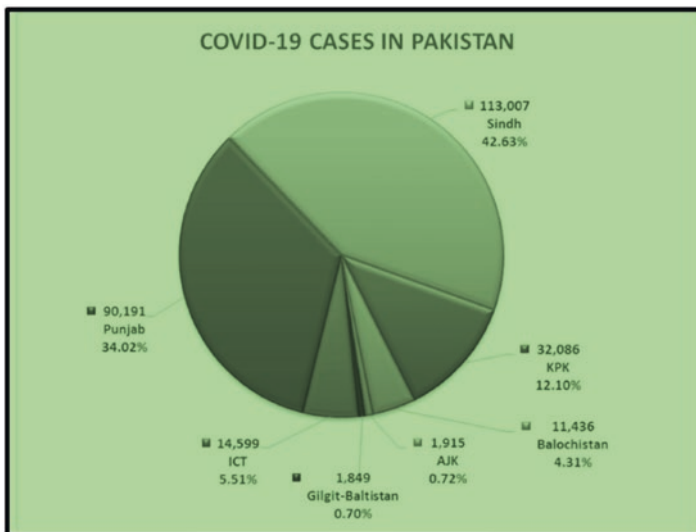


Fig. 4.12 Province-based reporting cases of COVID-19 in Pakistan. (Source: www.google.com)

reduction in business activities (Fig. 4.13) especially for exports at a massive level (World Bank, 2020b). Business firms associated with Pakistan are strictly trying to follow SOPs for the COVID-19 pandemic outbreak by bearing the extra cost for masks, gloves, and sanitizers for their safety and the safety of their customers (Umer & Khan, 2020).

According to the available information in Pakistan that is presented in Fig. 4.13, small and medium enterprises (SMEs) have to face a bundle of burdens such as 6% reduction in the labor force because of an epidemic. COVID-19 affects 48% of the supply chain and 33% of the transportation channel of Pakistan. The financial sector of Pakistan has affected much more than others in the COVID-19 pandemic with round-about 70% while 44% reduction in demand for products and services negatively impacts production 24%, sales 58%, and profits 42% accordingly.

The currency of Pakistan, PKR in terms of USD, has been devalued which is another threat for the business community associated with PSX in the outbreak of COVID-19 pandemic globally and especially in Pakistan (Chohan, 2020).

After all, the above-stated facts and figures show that Pakistan, among the developing economies of the world, may suffer much more until COVID-19 is defeated all over the world. The financial-economic impacts of coronavirus on the globe including Pakistan will leave “deep scars.”

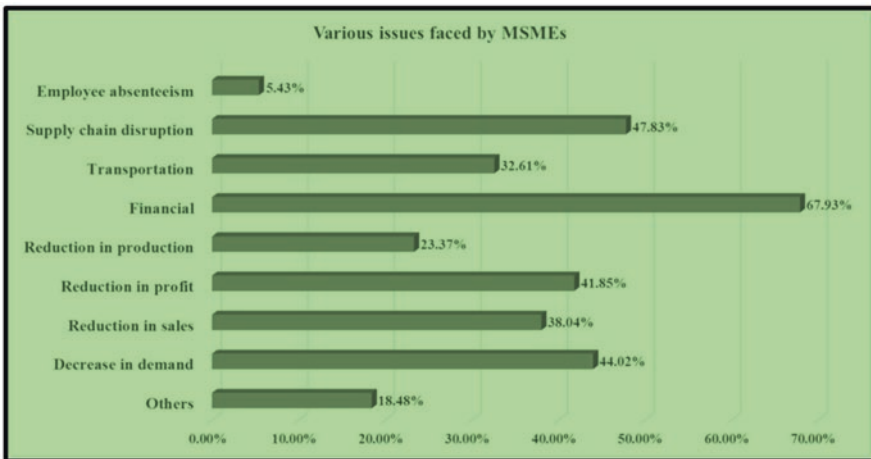


Fig. 4.13 Issues faced by business firms during COVID-19 in Pakistan. (Source: www.google.com and (Shafi et al., 2020))

4.2.1.4 India

The COVID-19 pandemic is constantly growing in global developing economies including India. The adverse impact of coronavirus on the economic growth of India may probably very serious for the Indian economy if such a pandemic does not come in control of India.

GDP growth of India for the present economic condition under the shadow of COVID-19 is expected to decline by 4.8% according to the recent reports of the United Nations (UN) for 2020. The UN Economic and Social Survey of Asia and Pacific 2020 report that COVID-19 would have socioeconomic consequences in the areas of especially tourism, power, trade, and other financial association of India even across the borders (United Nations, 2020).

The economic survey 2019–2020 provides indications for the real GDP of India at a rate of 5% as compared to GDP growth in 2018–2019 at the rate of 6.8% and so on (Fig. 4.14) which confirms decline due to outbreak of COVID-19 pandemic in India. The National Statistics Office (NSO) declared revised estimates (RE) about GDP growth quarterly, from 8.0 to 7.1% (first quarter), from 7.10 to 6.2% (second quarter), and from 6.2 to 5.6% (third quarter) respectively while economists estimated decline in GDP with 400 BP (1.6%) due to the only lockdown for 3 weeks in India (Chaudhary et al., 2020).

Mr. Yashwant, former Finance Minister of India, shared his analysis by stating that the estimated cost of lockdown for 21 days in India would bear a decline in 1%

	2017-18 1st RE	2018-19 PE	2019-20 1st AE	Percentage Points Change in growth rate in 2019-20 over 2018-19 (Increase(+)/ Decrease(-))
GVA at basic prices	6.9	6.6	4.9	-1.7
Agriculture and allied sectors	5	2.9	2.8	-0.1
Industry	5.9	6.9	2.5	-4.4
Mining and quarrying	5.1	1.3	1.5	-0.2
Manufacturing	5.9	6.9	2	-5
Electricity, Gas, Water, supply and other utility services	8.6	7	5.4	-1.6
Construction	5.6	8.7	3.2	-5.6
Services	8.1	7.5	6.9	-0.7
Trade, Hotel, Transport, communication and services related to broadcasting	7.8	6.9	5.9	-1
Financial, real estate and professional services	6.2	7.4	6.4	-1.1
Public administration, defence and other services	11.9	8.6	9.1	-0.5
GDP at Market Prices	7.2	6.8	5	-1.8

Fig. 4.14 GVA and GDP growth % of India, sector-wise for 2017–2020. (Source: www.google.com & Economic Survey Report by the National Statistic Office, India)

BP in GDP but if COVID-19 impacts as is going on wave wise may decline GDP by 2% in basis point in future in growth rate for 2020–2021.

Gross value added (GVA)- and gross domestic product (GDP)-based analysis of India is presented in Fig. 4.14. GVA and GDP are taken into 3 lag for 2017–2018 (before COVID-19), and this period is added only for factual information. For analysis purpose, the year 2018–2019 to 2019–2020 (within COVID-19) are considered. According to the information available at the website of the National Statistic Office of India (NSO), GVA was added by agriculture by 6.6% in 2018–2019 (before pandemic) and 4.9% in 2019–2020 (pandemic period). GVA of the agriculture sector indicates a 1.7% difference because of COVID-19 and so on.

Figure 4.14 shows that the GVA of the Indian manufacturing sector was very impressive in 2018–2019 by almost 7% but as the cases of COVID-19 reported including all the above sectors especially including this sector had to face a huge difference of 5% by dropping its value from 6.9 to 2% in 2019–2020 and so on. According to Fig. 4.14, the GVA of the construction industry has to consider a major influence of –5.6% due to lockdown situation and shortage of labor force in the epidemic period of 2019–2020, but good information is also available in Fig. 4.14 that is continuity of trade and hoteling with a difference of only 1% because of SOPs and take away policy of India and so on. The capital markets of India have to face many issues; even Foreign Portfolio Investors (FPIs) have withdrawn their invested amount near 250B from equity and 140B from debt market due to worst economic decline in a pandemic situation in national and international stocks markets respectively while because of this INR will be depreciated as compared to USD in the coming days.

The SMEs of India create almost 90% of jobs by providing employment opportunities to 115 M out of the total population with a 30% contribution to the GDP of India (Sipahi, 2020). Indian SMEs have to pay loan payments on a monthly or yearly basis, but because of COVID-19, the business operations of SMEs are disrupted in India while the cash cycle of SMEs is disturbed in a lockdown situation in Asia especially in India. The government of India will have to manage funds for SMEs because of restricted capital flow globally (Fig. 4.15).

Private consumption and government consumption are taken as total consumption of India to consider all sectors while the formulation of capital and trade balance of exports and imports have considered for investment need in India. Consumption and investment are compared in Fig. 4.15 to find the impact of COVID-19 on business continuity in India. Data and information are collected from the official reports and website of NSO-India for the period of 4 consistent years in three lags. In the year of 2017–2018, how much amount has been consumed and saved by India for the investment purposes from earnings before COVID-19 (Fig. 4.15). The second lag starts from 2018 to 2019, in that period COVID-19 came in China and then in the USA but not in India. The third lag is important because, in 2019–2020, coronavirus cases are being reported globally and especially in India.

According to Fig. 4.15 total consumption of India increased by 1.5% while a portion of government consumption is 0.7% and a portion of private consumption is 0.8% which shows private consumption is high in the pandemic of COVID-19 in

Table 2. Consumption and Investment Demand in India

	2017-18 1st RE	2018-19 PE	2019-20 1st AE	Percentage Points Change in growth rate in 2019-20 over 2018-19 (Increase(+)/ Decrease(-))
Total Consumption	70.0	70.6	72.1	1.5
Government Consumption	11.0	11.2	11.9	0.7
Private Consumption	59.0	59.4	60.2	0.8
Gross Fixed Capital Formation	28.6	29.3	28.1	-1.2
Net Exports	-3.2	-3.9	-2.8	1.1
Exports of Goods and Services	18.8	19.7	18.4	-1.3
Imports of Goods and Services	22.0	23.6	21.2	-2.4

Source: National Statistical Office. Year 2020. Consumption and Investment Demand.
Notes: RE—Revised estimates, PE—provisional estimates and AE—advanced estimates.

Fig. 4.15 Consumption and investment demand of India, sector-wise for 2017–2020. (Source: www.google.com & Economic Survey Report by the National Statistic Office, India)

India. Capital formation also declines during the epidemic due to the discontinuity of business in India by 1.2%.

Figure 4.15 shows a very worst balance of trade of India in the global pandemic of COVID-19. Before the pandemic, imports of India were 22.0 in 2017–2018 and 23.8 in 2018–2019 that meant an increase in imports by 1.8%, but during COVID-19, imports went down from 24 to 21 with a 3% difference because of no business activities, people being isolated during the lockdown.

On the other hand, the same condition is about exports that need to be improved for capital and to cover consumption. Before COVID-19, private and government sectors were consuming 18.8 on exports in 2017–2018 while 19.7 in 2018–2019. Before COVID-19 the exports of india were increasing with 1% that was good for India but as cases of COVID-19 report as exports goes in decline by 1.3% because of no business activities regarding demand of products and services other than the necessities globally including India.

4.3 Materials and Methods

An exploratory methodology is adopted to review the impact of the COVID-19 pandemic on the global business continuity management by reviewing the available recent and past studies about infectious diseases and business operations in such infectious pandemics including case studies, economic analysis videos, talk shows, business reports, business research work of literature, and papers, etc. (Shafi et al., 2020).

Business continuity has been selected as a dependent variable (DV) while COVID-19 pandemic has been chosen as an independent variable (IV) for this research-based chapter to cover up the economic issues (Mukherjee et al., 2020; Shafi et al., 2020; Kruger et al., 2020; Shafi et al., 2020; Jaworek et al., 2020; Zhan,

2020) in developed and developing economies of the world by selecting four major countries.

The USA and China are globally developed business countries, and as we know that there are some economic clashes between these two countries. India and Pakistan are too associated with each other in every success and failure in the economic terms being developing economies of the world. The economic world reports these countries especially for their economic progress because of their economic relationship. Such reasons make this research too interesting; that's why these countries have been chosen to represent the progressed and progressive global economies respectively. This may be the limitation toward this research unfortunately but according to available data and information, this is a suitable selection for this research to cover both types of economies in a preferable time frame for global review.

The data is extracted from different websites according to the specific review-based methodology including finance and statistics department of the sample developed and developing economic countries, websites of the World Bank, Asian Development Bank, United Nations, World Health Organization, and especially the official website of International Chamber of Commerce along with stock markets of sample countries (Bloom et al., 2005).

Research studies have already been done for the business continuity management in a pandemic situation based on the growth analysis model with equilibrium analysis for demand and supply chain management as an important factor of the business continuity management regardless there is a global pandemic situation or not (Karlsson et al., 2013).

Many variables can be adopted for economic analysis in pandemic like COVID-19. Economic projections are linked with forecasting of impacts of pandemic diseases, in this study, the main focus is to determine the damages of COVID-19 in global business sectors like sales and purchase, imports and exports, poverty and inflation, smuggling and corruption, etc. with the help of proper implication of business continuity plan as per guidelines of International Chamber of Commerce (ICC-2020).

4.4 Conclusion, Recommendation, Limitation, and Future Research Direction

The first wave of COVID-19 pandemic arrived in the world when most of the economies were struggling for their economic betterment by business continuity on regular basis. The spiraling and pervasive COVID-19 pandemic has disordered the global business operations by unpredictable financial disruption. The global business SMEs understand how to continue business activities in the current magnitude of COVID-19.

Meanwhile, every financial crisis in pandemic disease brings almost different business opportunities by the development of proper and effective business continuity plans for the welfare of the business community, economy, and society.

COVID-19 pandemic has delivered an effective message in its first wave to the whole business world to adopt a well-developed business continuity plan with a proper framework for the prosperity of the global economy.

This study is conducted to examine the impact of the COVID-19 pandemic outbreak in the global economy including the USA, China, Pakistan, and India to confirm the business continuity with the current magnitude of coronavirus.

This study is also helpful for the policymakers in streamlining strategies to ease the burden of COVID-19 on a plan for business continuity for global economies including developed and developing countries.

This study also describes in detail the guidelines of the International Chamber of Commerce, United Nations, World Bank, and the World Health Organization to continue business operations with the strict following of SOPs with the help of technology for the safety of the customers.

Furthermore, this study covers the major hurdles in the business continuity process especially including the burden of debt, negative GDP growth, imbalance of trade, inflation, and unemployment, but the most important issue is the shortage of demand and supply of products and services that affect the exports of the global economy in business manners.

This chapter contributes to the growing global literature on business continuity in the COVID-19 pandemic in two ways: first, detailed discussion about PAMA developed by ICC for the guidance of the global business community against such global pandemic; and second, to quantify the economic consequences of the COVID-19 pandemic by estimating the financial damages to the global business continuity management.

These steps can be helpful for the analysis of economic policy concerns for specific sectors of specific countries but in the future, the researchers can conduct an empirical- or literature-based study by considering other than sample economies and sample sectors because this study is based upon case studies of USA, China, Pakistan, and Indian as developed and developing economies of the world.

This chapter covers only four global economies (USA, China, India, and Pakistan) for global economic review for business continuity according to the outbreak of the COVID-19 pandemic with its first wave economic effects. For future research studies, researchers may choose other developed and progressive economies of the world with the second wave of this pandemic.

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