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# Multidimensional effect of covid-19 on the economy: evidence from survey data

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## ABSTRACT

This study aims to analyze the multidimensional effects of COVID-19 on the economy via considering the individuals and multi-sectors such as individuals/households, tourism, travel and transportation sector, environment, globalization, trade, economy, and the response of the government to the pandemic and also the economic and financial conditions of the respondents. Gathering primary data of 1015 sample sizes from eleven countries (including three countries from the top-ten most affected COVID-19 countries), the descriptive and graphical analysis and pre and post COVID-19 comparison confirmed the real impact of the global pandemic. All the mentioned sectors and the education and individual/household, are negatively affected except the environment positively affected. Based on the findings, policy recommendations are provided.

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Environment; globalization; tourism; trade; travel and transportation; COVID-19

## JEL CODES

E02; E4; F6; N7; Z3

## 1. Introduction

COVID-19, a Black Swan (“The heart of resilient leadership Responding to COVID-19,” n.d.) phenomenon has been spreading everywhere in the world. This global pandemic has affected every aspect of life; politics, economy, social life, technology, environment, health sector, and economic conditions globally. The economic activities are expected to be considerably slowdown as a result of this global dilemma. According to the International Monetary Fund forecast, the global economy will be contracted by about 4.4% in 2020, far greater than the Global Financial Crises’ magnitude in 2008–2009. The economic implications will be uncertain and extensive, with diverse effects on the supply chain, financial markets, labour markets, and the global economy. COVID-19 had a massive impact on employment, including work-from-home activities, reduction in a working hour, and furloughs. Working individuals are affected in two ways due to the crisis of public health. First, government consents forced millions of workers to work from home. Second, the economic recession led businesses to

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downsize; many workers work fewer hours, and consequently, either they are being paid partially, or they are being forced to lose their jobs completely (Adams-Prassl et al. 2020; Beland et al. 2020; Coibion et al. 2020; Gupta et al. 2020).

The trade and travel industry, major components of supply chain networks, are negatively affected by COVID-19, as confirmed by different markets' evidence. Global trade has been adversely affected by the worldwide outbreak of Covid-19 and affected all the economic sectors (Goodell & Huynh, 2020). Foreign trade-dependent countries are more negatively affected. On one side, it affects the strong exporter's countries as local companies having no output. Still, on the other side, it also affects the importers' economy due to a shortage of raw materials. As a consequence of the Covid-19 pandemic, world trade will be reduced to 32% in 2020, as expected by the World Trade Organization (WTO). Entertainment, hospitality, retail, and airline sectors are expected to suffer significantly due to fewer tourists and lower consumption due to the outbreak. Both trade and tourism are causing spillover effects throughout different levels of supplier networks on various linked businesses.

Relying on the different economic structures, the impact of the crisis on each country will be different. For example, countries with more reliance on agriculture and industries will be less affected and have fewer jobs at risk than more service-oriented countries. Covid19 affected poor or underdeveloped areas more adversely (Messner, 2020). Unfortunately, less educated and younger workers will be more expected to lose their job. Countries with poor socio-economic conditions like Bangladesh, Pakistan, India, etc., are at higher risk because of the shortage of health protection amenities (Singh & Chauhan, 2020). Investors forced pressure on the stock exchange market from the pandemic, and the largest decline was seen in the stock market in February 2020 after the financial crisis of 2008. To reduce the economic impact, central banks are relaxing monetary conditions via a decrease in interest rate to provide economic stimuli, covering credit and liquidity facilities and F.X. Swap lines (Bashir et al., 2020).

Concerning COVID-19, different monetary organizations observed that the current global pandemic effect would surpass the global financial crises' impact. As per the World Health Organization (WHO), there are about 109,594,835 confirmed cases of COVID-19, with having a total of 2,424,060 deaths globally. Because of these high rates of cases and deaths, most countries imposed curfew and lockdown in the countries. It is why the industrial and manufacturing sectors, tourism sector, hoteling, transport and tourism sectors, among others, are severely affected. Out of these sectors, the tourism sector is considered a major industry that accounts for 7% of the global trade as per UNWTO report 2020. For some of the tourism-dependent countries, it contributes up to 20% or more to the economy's GDP. However, the COVID-19 pandemic hit this sector hard by affecting the airline's industry (Tsionas, 2020), hotel industry and public services etc. The consequences of this could lead to the risk of 100–120 million people's jobs related to tourism, as per the UNWTO report. Almost every Covid-19 suffering republic spiritual and educational institutions, sports, commercial, tourism and transportation, industries except providing essential amenities are closed. The production level has badly decreased. As a result of too many expenses on the recovery and treatment of victimizing person and family

and the shortage of productivity, increasing unemployment and high inflation threat is becoming a challenge to even developed countries (Chakraborty & Maity, 2020).

Unlike the studies mentioned earlier and in the literature review (section-2), different studies investigate only one or two sectors such as economy, tourism sector, financial sector, etc. However, in response to the current global outbreak, this study investigates the multidimensional effect of covid-19 on the economy. This study's main objectives are to explore the level of information, understanding, and diverse perceptions of the respondent about COVID-19. Another objective of this study is to identify the impact of COVID-19 on different sectors such as agriculture, manufacturing, textile, international trade, global value chain, tourism, environment, and individual level. This study also focused on the consumption and poverty situation of the individuals. The next objective is to examine the economic impact of COVID-19 on employment statuses, availing financial services, and online practices. Lastly, this study aims to determine how people managed or managing their living expenses, such as consumption in the COVID-19 pandemic, and how it affects their financial well-being. To figure out how COVID-19 affected respondents economically, we employed various primary data tools to achieve the objectives.

## 2. Literature review

Many studies have documented the adverse effects of Covid-19 on mortality and physical health (Goldstein & Lee, 2020; Lin & Meissner, 2020). However, there is an increasing number of studies documenting the worsening status of well-being and mental health around the world, e.g. Brodeur et al. (2020b); de Pedraza et al. (2020); Davillas and Jones (2020); Tubadji et al. (2020). Mostly, everyone faces an amplified level of anxiety and distress due to social isolation at the time of pandemic (American et al., 2020). Safety measures such as lockdowns and social distancing are most likely to affect emotional health through financial loss, boredom, frustration, restricted interactions with neighbours, and other factors as group exclusion/discrimination and dearth and limited access to daily necessities and supplies (Lu et al., 2020). Beland et al. (2020) used a survey series from a Canadian social perspective and found that poor mental health is associated with less-educated old employed and unemployed persons and those who had to leave their jobs due to the Covid-19 pandemic. Etheridge and Spantig (2020) reported that the public's psychological well-being is adversely affected by lock-down policy policies. Using panel data, they found a great deterioration in the UK's general public's psychological well-being. Using various economic and demographic variables, Hamermesh (2020) concludes that happiness is based on how people utilized their time and with whom. The author also reports that people's mental health can be improved if their perception concerning other people and government is changed, which is linked to government's decisive actions.

According to Almond et al. (2020), He et al. (2020) and Cicala et al. (2020), a substantial reduction in economic activities related to the chemical industry has positively affected the environment by significantly improving the air quality. Almond et al. (2020) concluded that the earth's atmosphere emission is reducing due to low

fuel consumption due to limited transport facilities and industrial activities. Less demand for fuel consumption (diesel, coal, and gasoline) contributed positively to a decarbonized and sustained environment worldwide (Sharif et al., 2020). Although Covid-19 positively contributed to the environment, this pandemic should not be credited to these positive changes due to its role in human suffering and destroying the world's economy.

This pandemic also affected the tourism industry. It is well documented in several studies that show such crisis, including natural disasters, are affecting the tourism industry, for example, Sio-Chong and So (2020), Aliperti et al. (2019), Song et al. (2019), Rosselló and Sansó (2017), Qiu et al. (2020) and McAleer et al. (2010) made significant contributions in this regard. In addition to that, Yang and Wong (2020) also investigated the impact of the Covid-19 pandemic on the tourism industry by using a dynamic stochastic general equilibrium model. They concluded that the increasing health risks of Covid 19 and lock-down policies have decreased tourism demand. According to Mariolis et al. (2020) covid-19 affects the tourism and tourism have further multiplier effect on other macroeconomic variables, like employment, GDP, and on trade balance. By using a multisectoral model for Greek economy the authors showed a decrease in the employment level by 2.1 to 6.4 per cent. A fall in GDP is found to be around 2 to 6%, and 2.4 to 7.1 billion euros' deficit increase is found in trade balance because of the deficit of 3.5 to 10 billion euros in international travel. "Hotels and Restaurants," "Land Transport," "Agriculture," and "Real Estate," are directly and mainly effected by this deficit. While on the other hand, "Hotel and Restaurant Services" are mainly affected by the deficit of trade balance.

Kansiime et al. (2021) investigated how Kenya and Uganda's (East African Countries) household food security and income are affected Covid 19 pandemic. This study assessed that almost 67 per cent of respondent households face deterioration in their income due to the Covid 19 crisis. Their results from the Probit model show that households dependent on low income coming from labour work are more affected as their reduced income would lead to a decrease in their food consumption, which can affect them more adversely than other categories of the respondent. Prospective impacts of the crisis on national and global economic variables like employment, poverty, budget deficit, government expenditure and growth rate of GDP, etc., are documented in many studies (Monitor, 2020; Nicola et al., 2020; Sumner et al., 2020; UN-Habitat & WFP, 2020; WorldBank, 2020) According to Harris et al. (2020) economic effect of covid-19 impacted society members differently, relying on their livelihood strategies, socio-economic status and access to market, etc. They showed that lock-down restrictions and the crisis of Covid-19 heterogeneously affect the income, food security, and agricultural activities of small farmers in India.

One another consequence of Covid-19 is elevated unemployment worldwide (Aum et al., 2020; Rojas et al., 2020). This increase in the "discouraged workers" has an adverse effect on labour force participation (Coibion et al., 2020). Workers from diverse occupations have diverse effects during this pandemic in the US, as investigated by Beland et al. (2020). Less-educated workers, immigrants, and younger adults are more likely to be associated with those professions which may not be executed from home. So more probably, they experience a drop in their income (Yasenov,

2020). Qiu et al. (2020) find that all occupations and industries' labour market deteriorate without any significant diversification except those related to leading jobs in current situations like essential retail and nursing, etc.

Campello et al. (2020) found severe job losses in non-tradable sectors, credit-constrained firms, and industries where labour markets are highly concentrated. The authors gave evidence referring to the hub of a worldwide dilemma that some companies' business opportunities are expected to be increased, which caused the reallocation of labour. Barrero et al. (2020) state that hiring labour is increased in the technology sector, medical supplies, fast food chains/restaurant those are delivery-oriented and in delivery companies as Covid-19-induced demand in these companies.

Variables of the job-characteristic, face-to-face interaction and home-based work vary along three these major dimensions, (1) short-run versus long-run; (2) labour demand and supply and; (3) extensive versus intensive; are named as temporal, the primary channel of effects and relevant margins of adjustment. Labour supply in those industries where work can be done from home and low face-to-face interaction is required less likely to be affected, e.g. technical services, scientific and professionals. At the same time, industries with home-base-work capabilities and require high face-to-face interactions have a greater probability of being affected adversely due to a decline in productivity. Low HBW is capable, and high F2F interaction industries might be able to recover slowly after lock-down restriction ended, and low HBW capable and low F2F might be able to recover relatively quickly. From the firm's point of view, the Covid-19 crisis leads to temporary closure that caused huge short-term effects, permanent loss of an efficient employee, and a fall in job placements, categorized by strong heterogeneity across industries (Avdiu & Nayyar, 2020).

Higher transmission rates of covid-19 were observed with higher income cities due to higher economic activities and more social gatherings (Qiu et al., 2020). Covid-19 effect on the economy is a complicated mesh of interrelated parties: consumers, firms, employees, suppliers, and financial mediators. Each one is someone else's customer, employee, and lender, etc. cascading effect will be observed as a result of the breakdown in circular flow and supply chains due to specialization in productive activities and a high degree of interrelated companies (Gourinchas, 2020). Baldwin (2020) explains the effect of COVID-19 on the flows of income in society. First, households do not get wages, and therefore it decreases their consumption and savings levels. The reduction in saving decreases the investment, and hereafter finally shrinks the capital stock. Second, households lower their import demands; thus, it decreases world-wide income, and later it reduces the country's exports. Third, the demand/supply shocks lead to an interruption in international and domestic supply chains. Fourth, all of the shocks mentioned earlier and disruptions cause a reduction in output, causing a decline in production usage. In Covid-19 pandemic circumstances, labour is more affected than capital through working hour reduction, layoffs, and, therefore, low income (Brodeur et al., 2020a).

Concerning the diverse influence of COVID-19 on different sectors, many studies demonstrate its effect on financial sectors. Such studies include Rizvi et al. (2020) that investigated COVID-19 and assets management for the European Union (EU) case concerning styles of performance and investments. The study assessed the five-

month pandemic period from January to May 2020 while classified the pandemic period into three phases. The findings reveal that the social entrepreneurship funds only established positive returns all over the three phases. The funds' manager is also founding drifting from higher-risk options to the lower risky options in terms of investment strategy. For the January–June 2020 period, Mirza et al. (2020) investigated price reaction, fund performance, and volatility timing throughout COVID-19 in the EU. The study found that the majority of investment funds exhibit stressed performance, while the funds for social entrepreneurship bear flexibility. Mirza et al. (2020) examined the COVID-19 impact on the corporate solvency and policy responses for the EU case. The results asserted that the solvency profile of all the firms is observed to worsen. Moreover, the mining, manufacturing, and retail sectors are found the most vulnerable to the deterioration in market capitalization and sales revenue reduction. Human capital is also one of the focused research areas for scholars in this pandemic period. In this concern, Yarovaya et al. (2021) and Mirza et al. (2020) examined human capital efficiency on equity funds performance and mutual funds during the COVID-19 for EU and Latin America, respectively. The findings asserted that the funds with higher human capital efficiency outperform their counterparts significantly.

Many studies have been done on the adverse effect of different aspects such as mortality and physical health (Goldstein & Lee, 2020; Lin & Meissner, 2020), well-being, and mental health (Brodeur et al., 2020b; Davillas & Jones, 2020; de Pedraza et al., 2020; Tubadji et al., 2020). Also, these studies showed that the income of the households had been deteriorated due to the COVID-19 pandemic and the lockdown environment, and the unemployment and poverty ratio, budget deficit, and government expenditure has been increased while the GDP growth declined (Kansiime et al., 2021; Monitor, 2020; Nicola et al., 2020; Sumner et al., 2020; UN-Habitat & WFP, 2020; WorldBank, 2020). Still, the adverse effect of COVID-19 grows and negatively influence the financial sector, such as asset management (Rizvi et al., 2020), price reaction and funds performance (Mirza et al., 2020), corporate solvency (Mirza et al., 2020), and human capital efficiency impact on equity funds performance and mutual funds (Mirza et al., 2020; Yarovaya et al., 2021). As a matter of fact, these studies solely explain the negative impact of COVID-19 over these different sectors. However, the only positive impact of COVID-19 in the literature is found as the improvement in the environmental quality, which is because of the reduction in economic activities and decline in the manufacturing of various chemicals (Almond et al., 2020; Cicala et al., 2020; He et al., 2020) and decrease in demand for the fossil fuel consumption (Sharif et al., 2020).

In light of the above mention literature, it concluded that Covid-19 had transformed the world dynamic. It has affected government policies, political structures, economies, and individuals internationally. As pandemic expands, its impact is revealing on various aspects of individuals and human life. Form a wide range of literature; still, there is no study available covering the micro and macro aspects concerning the COVID-19 influence. Therefore, the need of the time is to investigate and explore the multidimensional effects of Covid-19 and, given the retorts, develop efficacious policies to deal with this virus. This research study has investigated the multidimensional

effects of Covid-19 on the global economy through primary data analysis. The study determined that, regardless of belief, race, religion, and culture, COVID 19 has severely affected the global economy through psychological, political, social, educational, economic, and gender-specific impacts on the individual and globally.

### **3. Data and methodology**

#### **3.1. Data**

The methodological approach adopted here is the so-called primary data collection survey. For this approach, a detailed and well-structured online questionnaire has been randomly shared with the selected eleven countries: Bangladesh, China, France, India, Malaysia, Mauritius, Nigeria, Pakistan, Qatar, Thailand, and the US. In this study's countries, three countries are among the top ten high COVID-19 cases globally, i.e. the US, China, and France (Pharmaceutical Technology, 2020). A random data collection technique has been adopted for equal probability to the general public and generalization of any region's results. A total of 1053 households/individuals were surveyed, and the data has been stored in the Google sheet. After cleaning the data, the sample size was reduced to 1015 responses only, as the incomplete and incorrectly filled questionnaires were excluded from the analysis process.

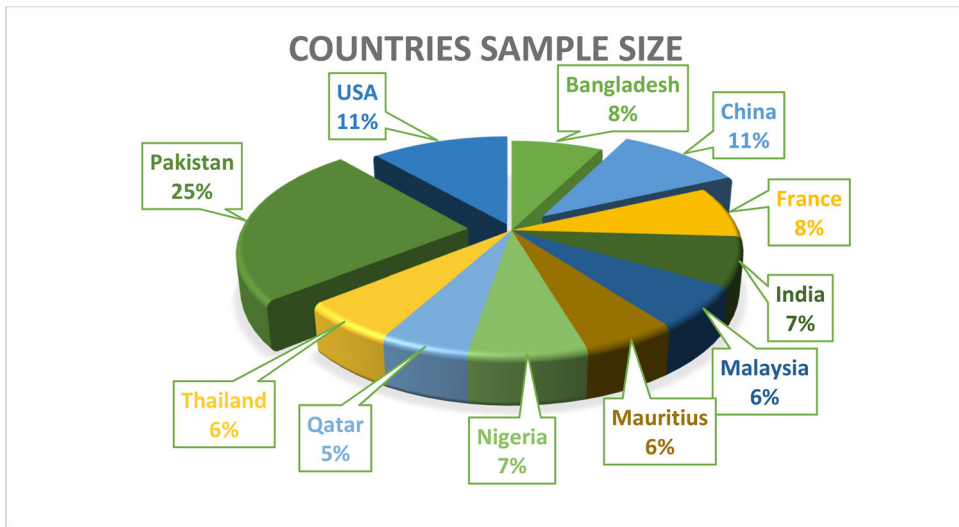
#### **3.2. Questionnaire design and pilot survey**

This study tried to consider every possible indicator to analyze the economic and socio-economic conditions of the households. Some of the important indicators are education, economic conditions and expenses management, employment, environment, tourism, pre and post usage of goods and services, and the individuals' perception about government policies and response to the pandemic are included in the questionnaire—[Note: the questionnaire that we used for data collection is provided in the appendix]. Before collecting the data, we did a pilot survey of 50 respondents and noted their responses. After improvements in the questionnaire and final review, we started collecting data randomly from the earlier mentioned countries.

#### **3.3. Methods**

After collecting and cleaning the data, we first checked the data's reliability by employing Cronbach's Alpha test. If the primary information is reliable, it is then barrierless to use it for further analysis and forecasting and also generalizing to any region. After that, we analyzed the data by calculating the descriptive statistics and also focused on graphical analysis. To identify the real impact of COVID-19 on the respondents' different sectors and routine-life, we have done descriptive estimations to compare pre and post COVID-19 sectors and routine-life conditions. The estimated results and the tables and graphs are shown in Section-4 of this research article.





**Figure 1.** Authors own calculations based on primary data.  
Source: Survey data.

## 4. Results and discussions

### 4.1. Data reliability

In the first part of the analysis, we focused on the questionnaire data's reliability over all the sample sizes from 11 countries.

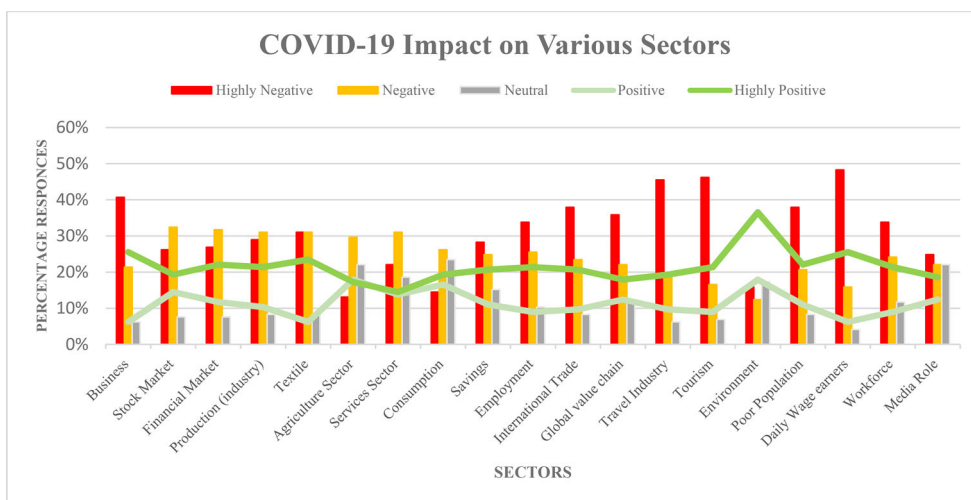
We employed the Cronbach  $\alpha$  test to determine the internal consistency of the multiple-choice questions Likert scale. The value for alpha value for Cronbach's test is 0.896, which is more than 0.7, as an acceptable range (Table 1). Hence, we can say that the data and the questionnaire have higher reliability.

### 4.2. Country-wise sample size, gender, and occupational distribution of the respondents

Distribution based on countries that contributed to the sample size consists of eleven countries in total, as shown in Figure 1, out of which the respondents from Pakistan covered 25% of the total sample size.

#### 4.2.1. Country-wise sample size distribution of the respondents

After Pakistan, two countries, i.e. the USA and China, contributed to the data at 11% for each. The rest of the countries are India, Malaysia, France, Thailand, Bangladesh, Mauritius, Qatar, and Nigeria that contributed to the data by holding seven, six, eight, six, eight, six, five, and seven per cent of the respondents, respectively. Out of these given sample sizes from all countries, the majority, with 77% of the respondents, is male, as shown in Figure 1(A), in the appendix. Whereas the rest of the respondents, i.e. 23%, represents the female from the gender category of the sample distribution. Respondents of these two gender categories are also distributed based on profession. Based on the profession, we classified the total respondents into three



**Figure 2.** Authors own calculations based on primary data.  
Source: Survey data.

classes, i.e. Full-time students, professionals or employed, and finally, the unemployed class. Out of the survey's total participants, the majority, with 54%, is professional or employed respondents (see Figure 1B, in appendix). Whereas forty per cent of the total respondents fall into the students' category, only 6% of the total participants' respondents are unemployed.

### 4.3. Covid-19 impact on different sectors

Concerning the impact of COVID-19 on different economic and social sectors, the respondents' responses are recorded and shown in Figure 2. The option available for discovering the effects of COVID-19 on the said sectors is a five-point Likert scale that communicates the opinions as Highly Negative, Negative, Neutral, Positive, and Highly Positive impact of the said pandemic on these sectors. From the prescribed figure results, it is clear the COVID-19 promotes only the environmental quality in this era of a global pandemic. The positive effect on the environment is because the world in a locked-down position, where all the businesses and international travels are restricted (Gössling et al., 2021), and so the energy consumption is reduced that in turn hinder carbon dioxide (CO<sub>2</sub>) as well as other greenhouse gas (GHG) emissions.

#### 4.3.1. COVID-19 impact on various sectors

However, the rest of the sectors are considered to be negatively affected due to COVID-19. Various sectors such as businesses, the travel industry, and the tourism sector are affected the most, as more than 40% of the respondents perceived that these sectors were affected severely. These outcomes are consistent with Deb and Nafi (2020) findings and Bartik et al. (2020). Moreover, nearly 50% of the total respondents are sure that the daily wage earners are affected severely (i.e. COVID-19 has a highly negative impact on daily wage earners). The results also conclude that more than 30% of the respondents considered COVID-19 to have a negative or highly

negative effect on the sectors like the stock market, financial market, production/manufacturing, textile, agriculture, services, employment, international trade, global value chain and also the poor population as well as workforce (labours). After World War II, the recent international travel restrictions and “stay at home” orders caused the global economy’s utmost severe disruption (Gössling et al., 2021). The respondents’ consumption and savings are also declined because of the current global pandemic; as the level of unemployment increases; so, the households started consuming their savings and minimizing their consumption pattern. Finally, the respondents’ perception of the role media played in this global pandemic is negative. The majority of the respondents are confident that media played a negative role in this pandemic environment.

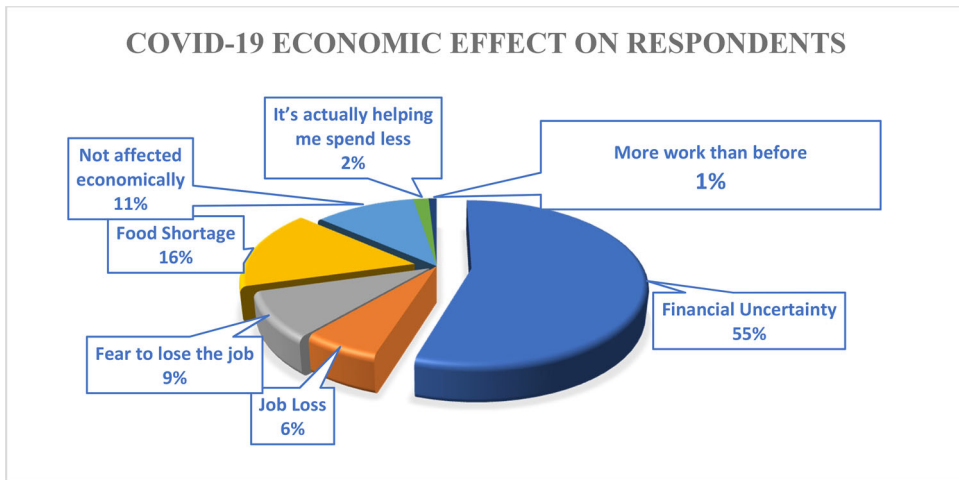
Economic growth is possible from an economic viewpoint when all sectors of the economy work and contribute to the countries’ GDP. However, in this case, almost all the sectors are shrunk because of the COVID-19 and lockdown environment. The respondents perceived that different sectors such as business, stock market, financial market, production/manufacturing, agriculture, international trade, global value chain, and travel industry are affected the most. In comparison, these are the sectors that act as pillars for countries’ economic growth. The shrinkage of these sectors badly affects the economy that leads to uncertain economic conditions and the mental and psychological health of the nation. The outcomes could lead to an upsurge in unemployment, and in response to unemployment, the saving and investment would fall for consumption purposes and poverty ratio surges. Hence, the COVID-19 is considered hazardous for both health and the economy.

#### **4.4. Covid-19 economic effect on respondents**

The impact of COVID-19 may not be limited only to the sectors but may also affect the households in various dimensions. These dimensions include financial uncertainty, job loss, fear of losing a job, and most importantly, the food shortage, which is the basic necessity of human survival. However, the effect is not always harmful or adverse, but may also be positive in some aspects, such as helping the households spend less money. These economic effects of COVID-19 on the respondents are provided in [Figure 3](#).

##### **4.4.1. COVID-19 economic effect on respondents**

More than half, i.e. 55% of the respondents, faced the issue of financial uncertainty. Financial uncertainty is the miss management or unavailability of resources to fulfil basic needs and necessities. After that, most of the respondents, with 16% of the total, faced the food shortage issue. In the locked-down positions, where stay-at-home orders create more problems of getting daily food for survival. Besides, six per cent of the total sample respondents already lost their jobs, and nine per cent of the total respondents fear the COVID-19 that they may lose their jobs shortly. Only one per cent of the respondents report that their working time has been increased compared to the normal routine. In the “locked-down” and “stay at home” conditions, most professionals work online from home, so because of the high demand for services,



**Figure 3.** Authors own calculations based on primary data. Source: Survey data.

their working hour time has been increased than the normal working days. In continuation, 11% of the respondents report that they are not affected economically in this global pandemic environment. Simultaneously, only two per cent of the respondents claimed that COVID-19 has a positive economic impact by helping them spend less than the normal routine. Hence, they favoured the COVID-19 impact only for economic concerns.

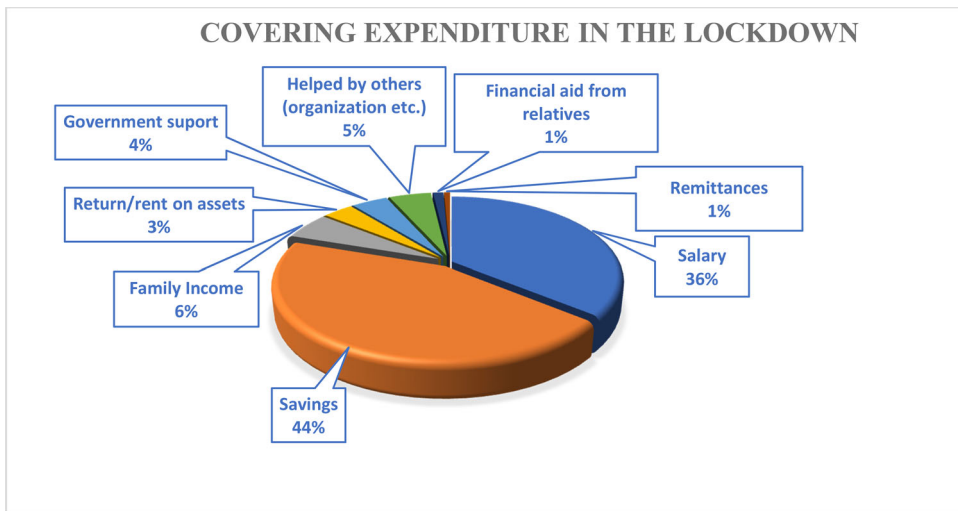
The economic effect of COVID-19 is linked here to the financial conditions or situations of the respondents. In this survey, most of the respondents or households face financial uncertainty in this global pandemic environment, followed by those who faced a food shortage. Also, some people lost their jobs, and some are fearing they may lose their jobs. In these uncertain circumstances, the poverty and unemployment levels would enhance. Which, in turn, enlarge the economic burden on the country.

#### **4.5. Covering expenditures in the lockdown**

As this is confirmed now, most of the respondents are report affected by COVID-19 from different dimensions, so it is now a worthy question, that from where the households are covering their daily life expenditure in this challenging time? The responses of the respondents are provided in [Figure 4](#).

##### **4.5.1. Covering expenditures in the lockdown**

In this concern, most of the respondents (44%) cover their routine life expenditures from their savings, followed by 36% of the respondents, who are still using their salaries for consumption expenditures. However, six per cent of the respondents are still dependent upon their family income (parental, brother's, or sister's income). In this hard time, only five and four per cent of the respondents reported having organizational and/or government support covering their expenditures in the COVID-19 pandemic lockdown, respectively. Three per cent of the respondents claimed that their expenses had been covered from return on asset(s), which might be rent on capital or



**Figure 4.** Authors own calculations based on primary data. Source: Survey data.

any other assets. Finally, only one per cent of the respondents covered their expenditures with their relatives' financial aid or help.

From the above discussion, most of the respondents are using their savings for consumption and other expenditures to survive. This huge figure showed the dependency of most households on savings, which is not a permanent income source but a diminishing source. This condition could lead households to fall under severe poverty, which is not the right call for both developed and developing economies. Instead, this could multiply the burden of poverty on the developing economy more than the developed economy.

#### **4.6. Categories of before and after the occurrence of the COVID-19 pandemic**

From the fore-mentioned expenditures fulfilment, it is now worthy of reporting the respondents' goods and services consumption and other social activities before and during the COVID-19 pandemic. It is clearly shown in Figure 5 (also see Tables A1 and A2 in Appendix) that the goods and services such as transport, bank, ATM, hotel services, hospital, buying of goods, online shopping, and digital payment were used frequently before the COVID-19 pandemic. The market visits, tourism activities and hiking/outings are most frequently used before this global pandemic. Working from home, online shopping, and selling goods are those categories that were not used or just rarely used before the global pandemic.

##### **4.6.1. Categories before COVID-19 occurrence**

However, after the sudden outbreak of COVID-19, it is noticed that the transport usage reduced from about 50% (frequently + most frequently) to only 29% (frequently + most frequently) usage, as shown in Figure 6 (also see Table A3 in Appendix). Similarly, a drop has been observed in the banking sector and ATM usage during the COVID-19 pandemic. The hotel services and hospital visits have also been reduced

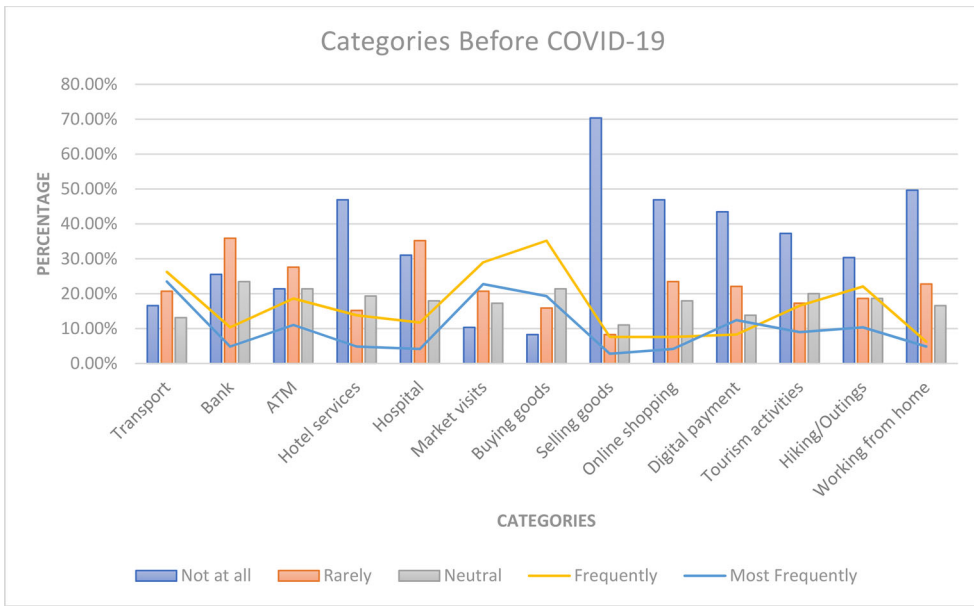


Figure 5. Authors own calculations based on primary data. Source: Survey data.

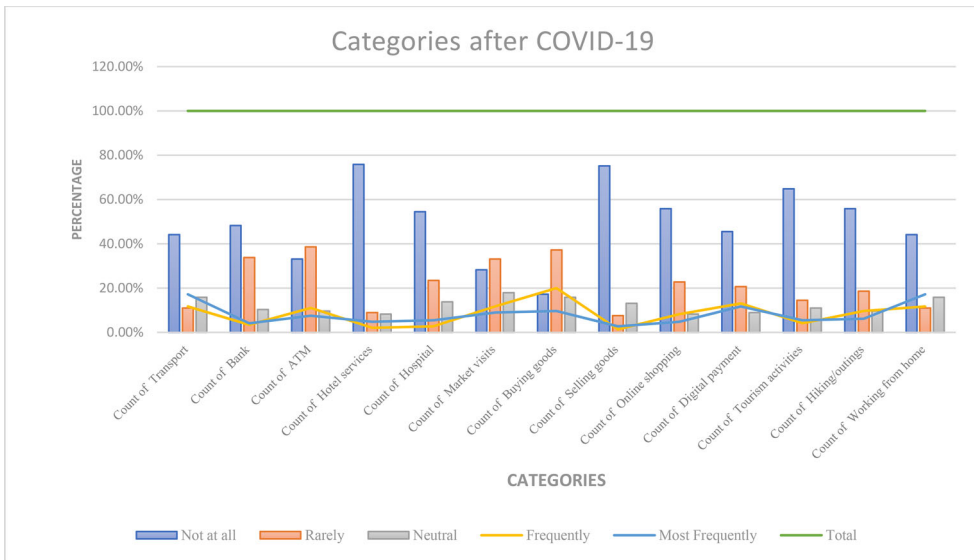


Figure 6. Authors own calculations based on primary data. Source: Survey data.

because of the lockdown and pandemic environment. A severe drop in market visits, i.e. from 52% of frequently and most frequently visits only 21%, and buying of goods, i.e. from 54% of frequently and most frequently buying to only 30% of buying goods. Besides, a slight decrease is also observed in the selling of goods for the respondents. Online shopping and digital payment played a crucial role in this pandemic situation as it shows an increase compared to the pre-COVID-19 period.

**Table 1.** Cronbach Alpha ( $\alpha$ ).

Name	Value
Cronbach's Alpha	0.896

Source: Survey data.

#### **4.6.2. Categories after COVID-19 occurrence**

The same table shows the categories fluctuation after the COVID-19 pandemic, a severe drop has been observed in tourism and hiking/outing activities. Particularly for the respondents, the tourism activities and hiking activities have been dropped from 25% to 10% and from 32% to 16%, which is mainly because of the stay-at-home and travel restrictions globally (Gössling et al., 2021). In contrast, the ratio of online working or working from home has been observed, increasing from 11% to 29 per cent. Most of the professionals are still involved in providing services via the internet and working from home.

Comparing the pre and post COVID-19 period, there is a dreadful reduction in almost all the prior discussed categories. Few categories such as selling of goods, using hotel services, tourism and hiking activities dropped at a very high level. In short, these are the sectors that aid to country's GDP and survival of the households. Diminishing these sectors' utilization could disturb both the micro and macroeconomic indicators.

#### **4.7. Covid-19 and "lifestyle, education and work Management"**

To find the impact of COVID-19 on the respondents' routine life, the variables such as lifestyle, online education system, and working cannot be ignored. The results above already hint at the adverse effect of COVID-19 on respondents' lives. However, from Table 2, it is clearly shown that out of the total respondents, almost 92% of the respondents argued that COVID-19 adversely affects their lifestyle. In contrast, a tiny portion of the respondents, having approximately 5% of respondents, claimed that COVID-19 did not affect their lifestyle.

Moving forward to the students' online education system after locked down and with travel restrictions, a question regarding the role or importance of online classes was asked from the respondents. Interestingly, the majority of the respondents, i.e. approximately 37% of the respondents, disagreed and found online classes unhelpful in continuing their studies. There may have many causes, such as no internet availability, no energy (electricity), or a proper environment. In concern of working before the COVID-19, more than 51% of the respondents were reported as employed, followed by 39.31% of the students in the total sample size. In the case of managing work after the locked down and stay at home conditions, 76.55% of the total respondents respond to this question, out of which, majority (34.23%) respondents do not work after the COVID-19 pandemic. At the same time, only 17.12% of respondents were reported as working from home. Moreover, 21.62% of the respondents are officially off, and 21.62% are still going to work. A limited number of the respondents, i.e. 5.41%, are reported on leave.

#### **4.8. Important questions about different variables**

In the same flow of the COVID-19 survey, there are many questions concerning the respondents' education, firm and community, and perceptions about the community

**Table 2.** COVID-19 and “lifestyle, education and work management.”

Questions	Available options	Do not know	Maybe	No	Yes	Total
Did COVID-19 affect your lifestyle?		7 (0.69%)	28 (2.76%)	49 (4.83%)	931 (91.72%)	1015 (100%)
If you are a student, will online classes help continue your studies during the COVID-19 pandemic?		182 (17.93%)	245 (24.14%)	371 (36.55%)	217 (21.38%)	1015 (100%)
<b>Question</b> Were you working before the COVID-19 pandemic?	<b>Available options</b>	<b>No</b> 63 (6.21%)	<b>No, I am a student</b> 399 (39.31%)	<b>Prefer not to say</b> 35 (3.45%)	<b>Yes</b> 518 (51.03%)	<b>Total</b> 1015 (100%)
<b>Question</b> If “Yes,” how you manage to work (after the COVID-19 pandemic)?	<b>Available options</b>	<b>Do not work</b> 266 (34.23%)	<b>Still going to work</b> 168 (21.62%)	<b>Officially off</b> 168 (21.62%)	<b>On-leave</b> 42 (5.41%)	<b>Working from home</b> 133 (17.12%)
						<b>Total</b> 777 (100%)

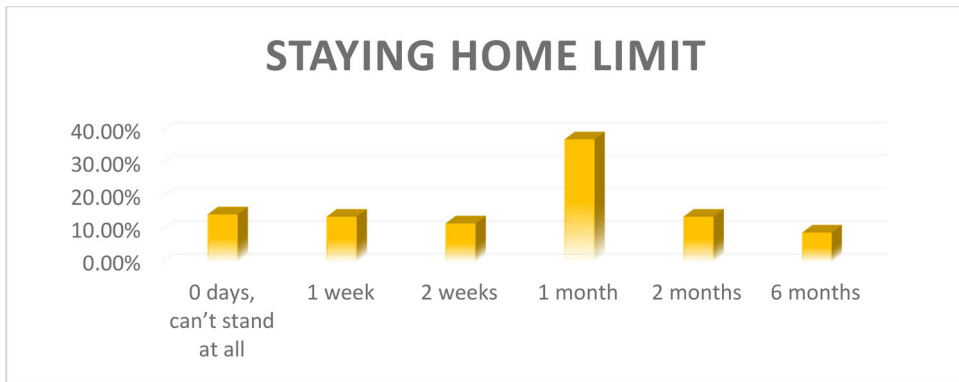
**Source:** Authors own calculations based on primary data.



**Table 3.** Essential Questions about different variables.

Question	Not at all	Rarely	Neutral	Frequently	Most frequently	Total
How is your education affected by COVID-19?	147 (14.48%)	77 (7.59%)	133 (13.10%)	245 (24.14%)	413 (40.69%)	1015 (100%)
How is your firm affected by COVID-19?	98 (9.66%)	105 (10.34%)	301 (29.66%)	266 (26.21%)	245 (24.14%)	1015 (100%)
Do you find economic policies effective in response to COVID-19?	245 (24.14%)	189 (18.62%)	287 (28.28%)	182 (17.93%)	112 (11.03%)	1015 (100%)
Do you think that educated people responded better to COVID-19?	98 (9.66%)	182 (17.93%)	175 (17.24%)	350 (34.48%)	210 (20.69%)	1015 (100%)
Do you think trade regulations should be revised to avoid any such calamity in the future?	98 (9.66%)	105 (10.34%)	217 (21.38%)	301 (29.66%)	294 (28.97%)	1015 (100%)
How do the developing countries respond to it?	133 (13.10%)	168 (16.55%)	336 (33.10%)	224 (22.07%)	154 (15.17%)	1015 (100%)
Community response to COVID-19 in your country	175 (17.24%)	210 (20.69%)	252 (24.83%)	287 (28.28%)	91 (8.97%)	1015 (100%)
Do panic and misinformation cause more than pandemic?	28 (2.76%)	105 (10.34%)	231 (22.76%)	273 (26.90%)	378 (37.24%)	1015 (100%)
Do you think that your country has any Pandemic Response Policy?	189 (18.62%)	238 (23.45%)	301 (29.66%)	175 (17.24%)	112 (11.03%)	1015 (100%)
The government response was right or not?	63 (6.21%)	168 (16.55%)	350 (34.48%)	252 (24.83%)	182 (17.93%)	1015 (100%)
Does government response in the shape of interest rate reduction and tax relief is helpful?	119 (11.72%)	168 (16.55%)	287 (28.28%)	245 (24.14%)	196 (19.31%)	1015 (100%)
Does the government bailout package is enough?	287 (28.28%)	238 (23.45%)	315 (31.03%)	126 (12.41%)	49 (4.83%)	1015 (100%)
Should firms compensate employees in such difficult times where firms are struggling?	70 (6.90%)	210 (20.69%)	203 (20.00%)	266 (26.21%)	266 (26.21%)	1015 (100%)
Do you think globalization is the primary source of spreading the virus?	91 (8.97%)	175 (17.24%)	231 (22.76%)	189 (18.62%)	329 (32.41%)	1015 (100%)
COVID-19 helped the environment	175 (17.24%)	84 (8.28%)	175 (17.24%)	273 (26.90%)	308 (30.34%)	1015 (100%)
Health Expenditures post COVID-19 should be increased or not?	119 (11.72%)	126 (12.41%)	168 (16.55%)	259 (25.52%)	343 (33.79%)	1015 (100%)

**Source:** Authors own calculations based on primary data.



**Figure 7.** Authors own calculations based on primary data.  
Source: Survey data.

and government actions and responses as provided in Table 3. The education of the respondents is affected very greatly, followed by the firm where the respondents work. In the meantime, the community response was not that efficient and productive because the majority of the respondents think that panic and misinformation cause more damage than the pandemic. Also, it is perceived that the government response to this global pandemic and the economic policies were not adequate to handle the damage caused by COVID-19. Additionally, most of the respondents thought that the government does not possess any pandemic response policy, and also, the bailout package is not enough to heal the damage. In this pandemic situation, educated people's response is thought to be better than the non-educated, so they demand health expenditures to increase. The only positive impact that the respondents reported is upon the enhancement of environmental quality. As discussed earlier, the COVID-19 locked down to keep the industrial sector and the travel sector, which helped the environment by reducing the CO<sub>2</sub> and other GHG emissions.

The majority of the respondents' perception is recorded as pessimistic regarding education, firms, economic policies, community response, panic and misinformation, globalization, and government packages. In this global pandemic period, where almost all the people worldwide are affected beyond a few dimensions, are not micro-level destruction, but massive and macro destruction, which the stakeholders must consider. The destruction could affect all the firms, educational institutes, and even the economy as a whole. Therefore, as per the respondents' perceptions, the policies must be revised by the firms and governments in these challenging times to subsidize the education and households in effective ways, such as facilitating the health, education, the daily wagers, and the firms.

#### **4.9. How long can you stay at home?**

Finally, the most crucial question is about how long the respondent can stay at home in the lockdown conditions. In the majority, with more than 35%, the respondents report that they can stay at home only for a month, as shown in Figure 7. After that,

about 14% of the respondents are in extreme conditions and cannot afford more days than staying at home. This is because of the earlier discussed issues like food shortage and financial uncertainty. The rest of the respondents, with approximately equal proportions, can stay one and two weeks and also for two months and six months, respectively.

## 5. Conclusion and policy recommendations

To examine the multidimensional effect of COVID-19 in the economy, this study adopted the primary data approach as the secondary data is not available/applicable till the time. In this primary survey, we tried to analyze the impact of COVID-19 based on people's perception, on the individuals/households, tourism, travel and transportation sector, environment, globalization, trade, economy, and government response to the pandemic. This survey also contributes to uncovering the economic and financial conditions of the respondents.

After the graphical and descriptive analysis of the gathered data, the results obtained confirmed the negative impact of COVID-19 on the individuals' economic and financial well-being and the sectors mentioned above. The responses recorded that the recent global pandemic disturbs an individual's lifestyle via locked down. In this panic, the educational institutes are closed, and the companies and industries are closed, which leads the households to economic/financial uncertainty. The respondents' perception of the government response and policies is negative, and it is believed that governments do not possess any reliable and possible solution to the pandemic. Also, the bailout packages in the shape of reducing the interest rate are not enough to overcome the damage caused by COVID-19. The positive effect of the COVID-19 is recorded in only one sector, i.e. the environment. The locked-down limits energy consumption, which inherently declined greenhouse gas (GHG) and carbon dioxide (CO<sub>2</sub>) emissions. So, environmental quality is reported to be increasing.

Hence it is concluded that all the micro and macro level sectors are negatively affected by the COVID-19 pandemic, which is hazardous at both households and macro level. So, there is a need for decisive actions that tend to overcome the COVID-19 adverse effects but support these vanishing and affected sectors to recover, which would add to the economy. Based on the priorly discussed issues, few policies are recommended by this study that could help recover the loss faced by households and even the macro sectors. This is a hard time for countries all over the world facing a sudden pandemic. However, the government and law enforcement institutions' responsibility is to focus on their citizens on a priority basis as most households are facing economic uncertainty and food shortage. Also, strict actions and policies concerning globalization and trade are needed to enforce for controlling the pandemic. In this regard, there is a need for a strong check and balance to avoid such kinds of destructive pandemics. The businesses and travel/transportations related policies need to be revised, such as health care and pandemic related safety measures should be strictly imposed to prevail further destruction. These sectors also need to be subsidized, as they are facing severe loss in this pandemic period.

Moreover, the earlier policies are not suitable for this global pandemic environment, and the incentives are necessary for businesses' survival (Deb & Nafi, 2020). The education sector is also one of the most affected sectors; almost all the students are unable to take classes physically so that online classes could be helpful in this concern. However, for this, the government should make sure the internet's presence mostly in rural areas. Furthermore, the health sector needs attention on an urgent basis. Therefore, funds should be allocated for the medication, and the treatment must be made accessible and affordable to all. The policymakers and law enforcement institutions should make the strick and soon implement these policies to overcome the loss affecting the households and economy.

Though this study tried to uncover the micro and macro-level impact of COVID-19 in the perception of people from different countries; but, due to limited time and finance, this study was unable to collect data from all the countries around the globe. This study ignores many micro and macroeconomic variables (such as satisfaction level and energy sector) due to various constraints. Hence, in the future, studies could be done that may consider the microeconomic indicators such as poverty situation, employment, education, and satisfaction level of people in the COVID-19 period. The macroeconomic indicators could also be considered for future studies such as the energy sector, manufacturing sector, globalization, international trade, and tourism. For these studies, primary and advanced time series and panel data techniques could be utilized.

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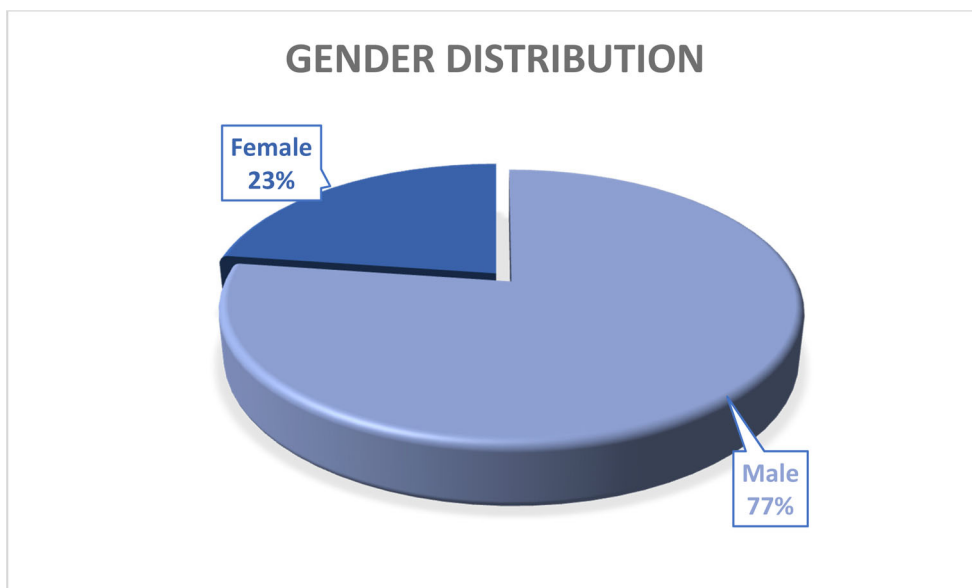
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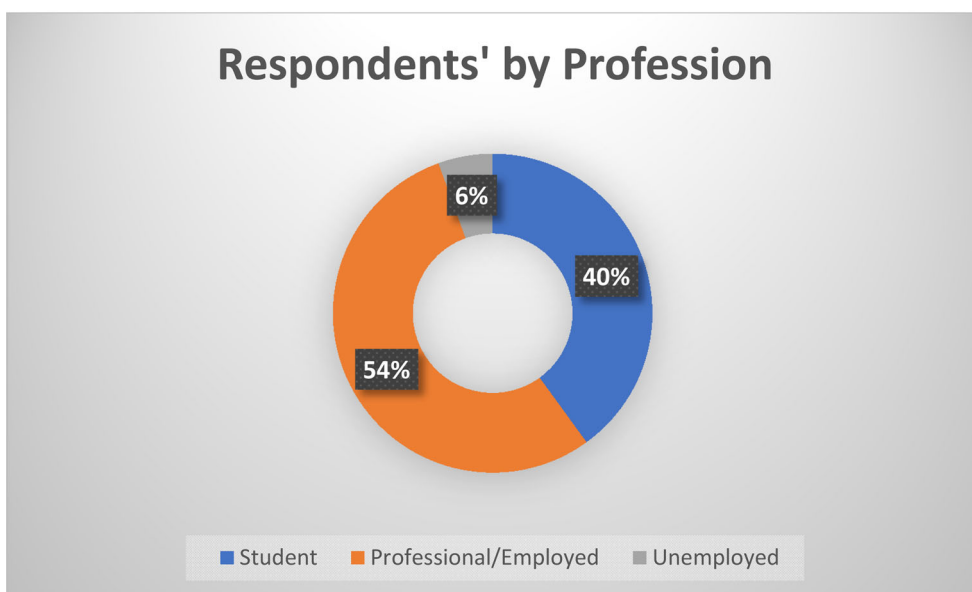
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## Appendix



Source: Authors own calculations based on primary data



Source: Authors own calculations based on primary data

**Figure A1.** (A) Gender Distribution. Source: Authors own calculations based on primary data. (B) Respondents' by Profession. Source: Authors own calculations based on primary data.



**Table A1.** Summary of the literature review.

Author(s)	Countries	Data type	Methodology	Findings
Almond, Du, & Zhang	China	China's official pollution Monitor data	Difference-in Differences	Positive effect of COVID-19 Lockdown on Air Pollution
Alon, Doeplke, Olmstead-Rumsey, & Tertilt	USA	American Time Use Survey 2017–2018; American Community Survey, 2017–2018.	Survey	Disproportionate Effect of COVID-19 on Gender Equality (in terms of labour force participation, childcare needs, workplace flexibility)
Andree	Netherlands	355 municipalities	OLS	COVID19 Lockdown and positive Connections with Air Pollution Exposure:
Beland, Brodeur, Mikola, & Wright	Canada	Labour Force Survey and Canadian Perspective Survey Series	OLS	Positive effect of COVID-19 and subsequent confinement on family stress and domestic violence
Beland et al.	USA	Current Population Survey	Difference-in Differences	Negative Impact of Safer-at Home Policies on Labor Market Outcomes
Brodeur, Cook, & Wright	USA	Occupational Information Network Survey	Difference-in Differences/Synthetic Control Method	Causal Effect of Safer-At-Home Orders on Pollution and Collision Externalities
Cicala, Holland, Mansur, Muller, & Yates	USA	Cellular tracking and high-frequency air pollution data daily cell phone mobility data	OLS	Positive Impact of Social Distancing on Emissions and Expected Health Effects Through Reduced Personal Vehicle Travel and Electricity Consumption. Negative Effect of Lockdown on Mental Health
Fetzer et al.	Global	A survey covering 58 countries and over 100,000 respondents	OLS	Negative Impact of Social Distancing Policies on Labor Market Outcomes
Gupta et al.	USA	Cell phone data measuring work-related mobility, State-level data on initial unemployment insurance claims, Unemployment-related internet searches, and Person-level data from the monthly Current Population Surveys from January 2015 to April 2020.	Difference-in Differences	
Hamermesh	USA	2012–2013 American Time Use Survey	OLS	Impacts of Spending Time "With Whom" and "How" during Lockdowns on Happiness
Harris et al. (2020)	India	Telephone survey with 448 farmers in 4 states	Ordered logit regressions	Negative livelihood and dietary effects of COVID-19 on vegetable producers
He et al. (2020)	China	1,600 monitoring stations	Difference-in Differences	Good Effect of COVID-19 Lockdown on Air Quality
Kansiime et al. (2021)	Kenya and Uganda	Online survey data from 442 respondents	Probit model	Two-thirds of the respondents experienced income shocks due to the COVID-19 that increase crisis food insecure respondents increased by 38% and 44% in Kenya and Uganda
Lu et al. (2020)	China	Cross-sectional online survey	Quantile Regression	Bad Impact of Quarantine and Attitudes Towards COVID-19 on Depressive Symptoms and Happiness
Rojas et al. (2020)	USA	District and state level school closures data	OLS	Negative Impact on Job Market Conditions in Response to COVID19 infections and Mitigation Policies
Tubadji et al. (2020)	UK, Italy and Sweden	Waves of a customized survey with more than 10,000 respondents	Difference-in Differences	Causal Effect of Lockdown on Mental Health
Yasenov (2020)	USA	Occupational Information Network American Community Survey	Data Analysis	Diverse Impact of Safer-at Home Policies on Different Occupations

**Table A2.** Use of the following before the COVID-19 pandemic.

Categories	Available options					Total
	Not at all	Rarely	Neutral	Frequently	Most frequently	
Transport	168 (16.55%)	210 (20.69%)	133 (13.10%)	266 (26.21%)	238 (23.45%)	1015 (100%)
Bank	259 (25.52%)	364 (35.86%)	238 (23.45%)	105 (10.34%)	49 (4.83%)	1015 (100%)
ATM	217 (21.38%)	280 (27.59%)	217 (21.38%)	189 (18.62%)	112 (11.03%)	1015 (100%)
Hotel services	476 (46.90%)	154 (15.17%)	196 (19.31%)	140 (13.79%)	49 (4.83%)	1015 (100%)
Hospital	315 (31.03%)	357 (35.17%)	182 (17.93%)	119 (11.72%)	42 (4.14%)	1015 (100%)
Market visits	105 (10.34%)	210 (20.69%)	175 (17.24%)	294 (28.97%)	231 (22.76%)	1015 (100%)
Buying goods	84 (8.28%)	161 (15.86%)	217 (21.38%)	357 (35.17%)	196 (19.31%)	1015 (100%)
Selling goods	714 (70.34%)	84 (8.28%)	112 (11.03%)	77 (7.59%)	28 (2.76%)	1015 (100%)
Online shopping	476 (46.90%)	238 (23.45%)	182 (17.93%)	77 (7.59%)	42 (4.14%)	1015 (100%)
Digital payment	441 (43.45%)	224 (22.07%)	140 (13.79%)	84 (8.28%)	126 (12.41%)	1015 (100%)
Tourism activities	378 (37.24%)	175 (17.24%)	203 (20.00%)	168 (16.55%)	91 (8.97%)	1015 (100%)
Hiking/Outings	308 (30.34%)	189 (18.62%)	189 (18.62%)	224 (22.07%)	105 (10.34%)	1015 (100%)
Working from home	504 (49.66%)	231 (22.76%)	168 (16.55%)	63 (6.21%)	49 (4.83%)	1015 (100%)

Source: Authors own calculations based on primary data.

**Table A3.** Use of the following during the COVID-19 pandemic.

Categories	Available options					Total
	Not at all	Rarely	Neutral	Frequently	Most frequently	
Transport	462 (44.14%)	259 (11.03%)	133 (15.86%)	42 (11.72%)	119 (17.24%)	1015 (100%)
Bank	490 (48.28%)	343 (33.79%)	105 (10.34%)	35 (3.45%)	42 (4.14%)	1015 (100%)
ATM	336 (33.10%)	392 (38.62%)	98 (9.66%)	112 (11.03%)	77 (7.59%)	1015 (100%)
Hotel services	770 (75.86%)	91 (8.97%)	84 (8.28%)	21 (2.07%)	49 (4.83%)	1015 (100%)
Hospital	553 (54.48%)	238 (23.45%)	140 (13.79%)	28 (2.76%)	56 (5.52%)	1015 (100%)
Market visits	287 (28.28%)	336 (33.10%)	182 (17.93%)	119 (11.72%)	91 (8.97%)	1015 (100%)
Buying goods	175 (17.24%)	378 (37.24%)	161 (15.86%)	203 (20.00%)	98 (9.66%)	1015 (100%)
Selling goods	763 (75.17%)	77 (7.59%)	133 (13.10%)	14 (1.38%)	28 (2.76%)	1015 (100%)
Online shopping	567 (55.86%)	231 (22.76%)	84 (8.28%)	84 (8.28%)	49 (4.83%)	1015 (100%)
Digital payment	462 (45.52%)	210 (20.69%)	91 (8.97%)	133 (13.10%)	119 (11.72%)	1015 (100%)
Tourism activities	658 (64.83%)	147 (14.48%)	112 (11.03%)	42 (4.14%)	56 (5.52%)	1015 (100%)
Hiking/Outings	567 (55.86%)	189 (18.62%)	98 (9.66%)	98 (9.66%)	63 (6.21%)	1015 (100%)
Working from home	448 (44.14%)	112 (11.03%)	161 (15.86%)	119 (11.72%)	175 (17.24%)	1015 (100%)

Source: Authors own calculations based on primary data.

**Multidimensional effect of covid-19 on the economy: evidence from survey data**

This questionnaire survey is about the impact of COVID-19, especially on individuals and households, tourism, travel/transportation, Globalization, Trade, Economy, and the government's response to the pandemic. Your information will be kept confidential and only be used for research purposes. Your truthful and honest answer will be appreciated.

**Demographic Information**

1. Name: \_\_\_\_\_
2. Gender:
  - Male
  - Female
  - Other
3. Age:
  - Upto 15
  - 16–25
  - 26–35
  - 36–45
  - 46–55
  - Above55
4. Marital status:
  - Single
  - Married
  - Divorced
  - Widowed
5. Education:
  - None
  - Under Matriculation (less than 10 years)
  - Matriculation (10 years)
  - Intermediate (12 years)
  - Graduate (14–16 years)
  - Post Graduate (18 years)
  - Doctorate
  - Post Doctorate
  - Other: \_\_\_\_\_.
6. Which country you are currently living in? Specify \_\_\_\_\_.
7. Which district you are currently living in? Specify \_\_\_\_\_.
8. What is your profession? Specify \_\_\_\_\_.

**Survey Questions**

9. Did you hear about COVID-19?
  - Yes
  - No
  - Refused to answer
10. COVID-19 comes into existence/outbreak because of:
  - Climate Change
  - Weather
  - Human activities
  - Natural
  - Carelessness of lab. Scientists
  - Don't know
  - Refused to answer
  - Other (specify) \_\_\_\_\_.
11. Do you think globalization is the main source of spreading the virus?
  - Yes
  - No
  - Don't know
  - Refused to answer
12. Is your country/region locked-down because of COVID-19?
  - Yes
  - No
  - Don't know
  - Refused to answer
13. Did COVID-19 affect your lifestyle?
  - Yes
  - No
  - Don't know
  - Refused to answer
14. Were you working before the COVID-19 pandemic?
  - Yes
  - No
  - Refused to answer
15. How you manage your work (after COVID-19 pandemics)?
  - Working from home
  - Going to the workplace
  - Do not work
  - On-leave
  - Officially off
16. Have you gone to work in the last month?
  - Yes
  - No
  - No, I am student
  - Refused to answer

## 17. How would you rate variables affected by COVID-19:

Name	Whereas, A (Not at all), B (Rarely), C (Neutral), D (Some-times), and E (Often).				
How is your education affected by COVID-19?	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
Do you think online education is beneficial?	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
How is your firm affected by COVID-19?	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
Do you find economic policies effective in response to COVID-19?	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
Do you think that educated people responded better to COVID-19?	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
Do you think trade regulations should be revised to avoid any such calamity in the future?	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
How do the developing countries respond to it?	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
Community response to COVID-19 in your country	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
Do panic and misinformation cause more than pandemic?	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
Do you think that your country has any Pandemic Response Policy?	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
The government response was right or not?	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
Does government response in the shape of interest rate reduction and tax relief is helpful?	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
Does the government bailout package is enough?	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
Should firms compensate employees in such difficult times where firms are struggling?	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
Do you think globalization is the main source of spreading the virus?	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
COVID-19 helped the environment	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
Health Expenditures post COVID-19 should be increased or not?	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E

## 18. How does it affect you economically? (Check all that applies)

- Fear to lose the job
- Loss job
- Financial Uncertainty
- Food Shortage
- Others \_\_\_\_\_

## 19. How does COVID-19 affect the following?

Namely	Whereas A (Strong Negative), B (Negative), C (Neutral), D (Positive) and, E (Strong Positive).				
Business	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
Stock Market	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
Financial Market	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
Production (industry)	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
Textile	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
Agriculture Sector	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
Services Sector	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
Consumption	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
Saving	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
Employment	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
International Trade	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
Global value chain	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
Travel Industry	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
Tourism	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
Environment	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
Poor Population	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
Daily Wage earners	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
Workforce	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E
The role of media in controlling COVID-19	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E

20. Use or involvement in the following activities, before and after the pandemic:

Name	Use or involvement in the following, before and after COVID-19 pandemic (check all that applies)	
	Before COVID-19 pandemic	During COVID-19 pandemic
Transport	<input type="checkbox"/> Before COVID-19 pandemic	<input type="checkbox"/> During COVID-19 pandemic
Bank	<input type="checkbox"/> Before COVID-19 pandemic	<input type="checkbox"/> During COVID-19 pandemic
ATM	<input type="checkbox"/> Before COVID-19 pandemic	<input type="checkbox"/> During COVID-19 pandemic
Hotel services	<input type="checkbox"/> Before COVID-19 pandemic	<input type="checkbox"/> During COVID-19 pandemic
Hospital	<input type="checkbox"/> Before COVID-19 pandemic	<input type="checkbox"/> During COVID-19 pandemic
Market visits	<input type="checkbox"/> Before COVID-19 pandemic	<input type="checkbox"/> During COVID-19 pandemic
Buying goods	<input type="checkbox"/> Before COVID-19 pandemic	<input type="checkbox"/> During COVID-19 pandemic
Selling goods	<input type="checkbox"/> Before COVID-19 pandemic	<input type="checkbox"/> During COVID-19 pandemic
Online shopping	<input type="checkbox"/> Before COVID-19 pandemic	<input type="checkbox"/> During COVID-19 pandemic
Digital payment	<input type="checkbox"/> Before COVID-19 pandemic	<input type="checkbox"/> During COVID-19 pandemic
Tourism activities	<input type="checkbox"/> Before COVID-19 pandemic	<input type="checkbox"/> During COVID-19 pandemic
Working from home	<input type="checkbox"/> Before COVID-19 pandemic	<input type="checkbox"/> During COVID-19 pandemic

21. How did you manage/managing your living expenses during the lockdown?

- Salary     Saving     Return on asset(s)  
 Any other source(s) (specify: \_\_\_\_\_)

22. Which strategy should the government adopt to control the effect of COVID-19 on the general population?

- Lockdown     Mitigation     Awareness programs     Do nothing

23. If you are currently at home, how much longer can you stay?

- 0 days, can't stand at all     1 week     2 weeks  
 1 month     2 months     6 months

24. Any Comment

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