Impact of Covid 19 on The Industrial and Labor Economy of China

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.Abstract

China, as demonstrated by its macroeconomic data and good cooperation with the IMF, is the second biggest global economy. The breakdown of the pandemic was a big shock that brought China's forecast GDP growth back to 2020. The impending recession resulted in economic losses, reduced growth, and a further decline in the labor economy. The present study aims to analyze the covetous effects of COVID-19 via Chinese enterprises on the labor and industrial economy. The study focuses on the consequences for the industry and workforce of COVID-19. The research helps shed light on the issues and progress in China's economy and encompasses its uniqueness. The paper adds to the special issue on Chinese economic issues and progress. The Chinese population is utilized for study, which shows that industries, whose labor is more sensitive to covetousness, are more likely to display less efficiency and profitability. There was a negative link between the research variables, which is less than 5 percent. The greater the industries and workforce exposed to COVID-19, the lower their relative economy, the greater the populations the lower their relative economy. The research is the first of its sort in the world to be published and is regarded as innovative research of its sort.

Keyword: Covid-19, Industry, Economy, Labor, China

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Overview

The COVID-19 epidemic has unpredictably affected markets and economies worldwide, estimating that the world's GDP would drop by 5.2%, with the WTO projecting a global trade decline of up to 40%. The scenario in Asia does not change, given that most Asiancountries

already have a weaker economy as indicated in its bad macroeconomic statistics and low IMF compliance. The pandemic breakout was a further shock that dropped China's predicted GDP growth to in 2020(Nicola et al., 2020). Moreover, all stores, restaurants, and shops

, include fitness and entertainment and recreational facilities, were closed down nationally in China. The authorities also recommended individuals remain home to prevent COVID-19 spread. Since June, the result of the present has been gradually loosened. Shops, bars, and malls have been reopened to COVID-19 SOP requirements and all vendors must stay closed off-days. Exceptions were those companies who provide necessary goods, such as pharmacies, hospitals, etc. People should always use face masks while moving out of their house(Susilawati et al., 2020).

The COVID-19 epidemic is unprecedented and has a huge effect. According to the UN study COVID-19 Social and economic Interim Report

and Response' from China, the industrial sector had a substantial contraction in the first quarters of 2020. In the first quarter of 2020, all three primary sectors, namely agriculture, industry, and services sustained economic losses(Ruiz Estrada et al., 2020). However, the pandemic affected the sectors unequally; the services sector was most badly struck, followed by the industrial and agricultural sectors. Significant revenue losses have been sustained in the services industry, amusement, tourism, tourism, and logistics. In the first quarter of 2020, construction activities slowed significantly, while reductions in tourism have had severe effects on hotel and foodservice operations. particularly in China's provinces(Ruiz Estrada et al., 2020; Susilawati et al., 2020).

The studies will look at these sectors, especially the industrial sector, in greater depth and determine the implications of the epidemic on companies, how they cope with the crisis and what kinds of help they have received up till now. In addition, we address the influence on the country's progress towards equitable and sustainable industrial growth as embodied within the Sustainable Development Objective for building resilient infrastructure, promoting inclusive and sustainable industrialization, and fostering innovation. Finally, we are offering some policy proposals(Barua, 2020).

medium-sized and manufacturing companies saw a decline in export orders or a total shutdown which led to the loss of income and jobs. Similarly, the surgical business is 100% exportable The pandemic mayhem has generated customers and deliveries either delayed or stopped in China's most crucial export markets. The industry is also reliant on imported metal; the input supply has been affected by a shutdown and general slowdown. In addition, companies claimed the incurrence of exorbitant expenditures owing to demurrage when shipments cannot be cleared(Khalid et al., 2021).

Despite the present troubles, many nations face as a result of the Coronavirus Pandemic (COVID-19), major effects are projected on the labor market results. While pandemics fluctuate, they affect economic production inexorably (Ahmad et al., 2019). The 1347-1352 Black Death caused over 75 million fatalities worldwide, destroying major urban places with fewer

rural losses. This has resulted in a decrease in the workforce available, therefore boosting industrial salaries(Shen et al., 2020).

Moreover, even though the situation in China has steadily improved, the trend towards a spread of the worldwide pandemic is still highly severe and actions to block and prevent epidemics have a major effect on the global economy in different nations. In the United States and Europe, the Oxford Economics study states that the Purchasing Manager Index (PMI) hit the highest level and consumer trust in South Korea fell back to the lowest level in 2009. The worldwide domestic gross product (GDP) growth is predicted to decrease by more than 1% by 2020. According to the Institute for Supply Management's study, approximately 75 percent of enterprises have suffered interruption in the supply chain owing to transit constraints. As part of a global economic supply chain, China will incur significant losses as a result of the breakout of the virus. Based on the evolution of the external epidemiological situation, the economic recovery of China still has major practical importance in estimating economic losses in many scenarios and taking effective measures to sustain GDP growth by 6%(Debata et al., 2020).

The imminent recession will cause job losses, decreased salaries, and more poverty. The immediate effects may nonetheless lead to additional short- to medium-term repercussions, which in the longer term may be just as severe. For example, job losses harm future income owing to interruptions, loss of productivity, skills in connection protractedunemployment, and the lack of job capital chances. Previous crises resulted in losses in earnings that continued for many years. The purpose of the current research is to investigate the covetous influence on the labor economy and the industrial economy via Chinese companies(Bashir et al., 2020).

Problem Statement

Its expansion has saddled national economies and companies with the expenses of dealing with additional lockdown measures to combat the transmission of the infection. Many still worry, despite the discovery of new vaccinations, how the recovery would look. Industries, including manufacturers, manufacturing companies, construction companies, and employees are also impacted by the pandemic which creates an economic deficit in the country's economy. The study focuses here on the implications of COVID-19 on industry and the labor force(Osotimehin & Popov, 2020).

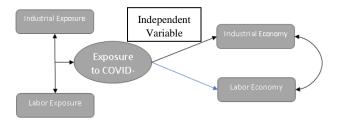
Aims and Objectives

As covered in the above section depending upon the research problem, the present stud is an effort to bring insights into the covid-19 effected economic impact in the Chinese industries and workforce. The study contributes to the special issue to shed light on challenges and development of China's economy as well and frames the originality of its kind.

Conceptual Framework

Theoretical Model

In our study model industrial economy, labor economyis used to evaluateddependent variable while the independent variable is exposure to COVID-19 whose dimensions are exposure to industrial and labor. The effect is investigated using regression analysis in IBM AMOS.



Review of Literature

COVID-19, the new coronavirus SARS-CoV-2, has disrupted the world's financial system, economies, and cultures. This research focuses on China and discusses several subjects including the effect of COVID-19 on the Chinese economy, the policy responses of China to this shock, such as fiscal, monetary, and institutional measures, and consequences, such as the nature of China's policy actions, benefits, and cost. This research also examines issues that need to be addressed in the future. Given China's global relevance in terms of the

size of its economy, its support to world development, and expanding influence, this research provides policymakers and investors throughout the globe with vital and relevant inputs.

Industrial economic effect

Most nations have recently joined the new of coronavirus outbreak. unexpected outbreak has had a major influence on the world economy and has stepped up the global globalization divide and global economic slump. Although Chinese epidemics have steadily stabilized, China's economy undoubtedly affected by difficult international circumstances. Pan et al.'s (2021)report provide three scenarios to examine the effects of the epidemic upon China's economy, based on the unpredictability of the future pandemic. The first is that the epidemic is controlled without a rebound in both home and foreign countries in June; the other one is that the household epidemic is essentially controlled but not controlled effectively; the third is that the pandemic situation in China is booming because of the influence of the import cases from abroad, which again destroy the economy. Some comparable economic recovery recommendations are also put out, minimizing economic losses and speeding up the pace of national economic recovery. Furthermore, these proposa erence value for Dependent Variable other nations (1 an et al., 2021; Škare et al., 2021).

A wider literature on finances employs risk factors to examine equity returns, and very few articles include machine learning approaches. In Group 10-K Words Hanley & Hoberg (2019) and Lopez Reina (2020) utilize unchecked learning algorithms in clusters linked to stock performance. Ke et al. (2019) are proposing a supervised classification method for the prediction of stock returns from media text data that exceeds normal sentiment dictionary performance at the return. Our work focuses more on grouping concepts in interpretable categories that help us understand how the response to frequent shocks at the company level is motivated(Ozili, 2020).

Official estimates indicate that China's economy was growing at the weakest rate in almost four decades the year before, yet it remains the only major country that has grown in 2020. Despite

Covid-19 shutdowns forcing production to fall in early 2020, the economy increased 2.3 percent last year. The economy has been supported by rigorous virus preventive measures and emergency support for firms. Growth rose to 6.5 percent in the latter three months of the year. The GDP numbers indicate that the economy has just about normalized. This pace will continue, although the current outbreak of Covid-19 in a few northern China provinces may briefly lead to fluctuations, said Yue Su, the lead economist for such Economist Intelligence Unit. Including a Reuters poll, both China's mainland and Hong Kong's Hang Seng saw slight advances on recent numbers that surpassed experts' forecasts. In 2020, however, Covid-19 remained a severe drop in growth, with national plant and factory shutdowns force economic growth back to its worst pace for four decades. The manufacturing sector in China looks to have rebounded, with figures from Monday indicating a rise of 7.3 percent in industrial production. Exports led the way, too. Data indicated last week that Chinese exports surged more than anticipated in December, with global coronavirus disruptions fueling the demand for Chinese products. Despite a rising yuan, China's exports are more costly for foreign customers.

Labor Economic Effect

The epidemic has led to a dramatic fall in demand for work, as indicated by the number of job ads, which has boosted competition for positions. In mid-March 2020, when national lock-out procedures were imposed, the number of employment adverts dropped by 76 percent over the same time in 2019. Economic shocks of this scale may have different consequences for men and women even when these disparities are masked by the overall effects of shocks. Workers concentrating in sectors that are isolated from an economic shock may be shielded throughout the crisis and as the majority of labor markets are gender-based, the impact on men and women may be different. Social standards may also affect men's and women's employment amid crises. If standards mandate the retention of "breadwinner" position for males, when employment become scarce, women may bear the burden, put down and hire upswings (Elson 2010).

Even though ladies are disproportionately

represented in insecure, minimal jobs, they are usually the first women to be fired during crises (Cho and Newhouse 2011), but participation by women in the workforce can also grow when households that require additional income demand that women family members seek employment (Rubery 2010; Starr 2014).

This paper explores the gender effects of the COVID-19 pandemics on labor markets and other indices of welfare in China, whose participation of women is among the lowest in the world. While women make up 49.2% of Pakistan's population (Pakistan Statistical Bureau, Job Force Survey) their involvement in the labor market is among the lowest in the world, particularly in metropolitan areas(Phillipson et al., 2020).

It remains much lower for males than the FLP. which for over three decades hovered around 82 percent. Most of the FLFP rise from 1992 to 2015 was driven by unpaid rural employment in agriculture, whereas FLFP in urban areas stayed practically steady, growing marginally from about 7% to 11%. There were several explications for the low FLFP in metropolitan regions, including poor human capital, women's safety concerns, mobility limits, discrimination workplace, marriage, disproportionate household obligations. Impacts arising from COVID-19 may lead to additional decreases in women's economic participation and jeopardize the meager profits of recent decades(Ozili, 2020).

Methodology

Research may be defined very widely as the systematic collecting and evaluation of data and knowledge on any topic. Research seeks to pursue solutions through rigorous methods to metaphysical and practical questions. There are many methods of study depending on the approach and context, several of which include (a) Descriptive analysis focuses on gathering evidence that determine the existence of what happens. (b) examination of the relevance of the theory based on study of gathered evidence is involved, (c) applied analysis is undertaken to provide solutions to practical questions to be resolved and to help make decisions in diverse fields like product design, process design and

policy making, (d) fundamental science is conducted to satisfy scientific curiosity rather than to use research evidence for immediate realistic use. Qualitative research (e) examines factors that are not quantifiable and thus not subject to estimation and quantitative interpretation subject. for the study comparison, quantitative study (f) requires considerable use of instruments and methods in quantitative analysis.

A quantitative cross-sectional survey was conducted to collect the primary data consisting on the defined variables. The main data was used to conduct this quantitative investigation. Data was collected from 140 survey participants in a sample size of 100, and questionnaire survey were used as a data collection tool. The financial system in China has been identified as a target audience, with both industry and government participants being included. IBM AMOS was used to test, analyze, and interpret the collected data. As a result, the study results were adequately interpreted using a descriptive study(Denzin & Lincoln, 2008). Researchers often consider interpretivism as a qualitative analysis. This research makes use of descriptive research design. Descriptive analysis design is used to define new information about persons, behaviors, conditions, events or occurrence of such events or circumstances (Gliner et al., 2000). Descriptive analysis is sometimes referred to as descriptive research, and may define the results and features of any study.

Population

In our research study, the research study population or participants are the Chinese firms population belong to the banking sectors of Paksitan.

Materials / Instruments

The main data was used to conduct this quantitative investigation. Data was collected

from 140 survey participants in a sample size of 100, and questionnaire survey were used as a data collection tool. The economic system in China has been identified as a target audience, with both industry and labor participants being included. AMOS was used to test, analyze, and interpret the collected data. As a result, the study results were adequately interpreted using a descriptive study.

Survey Implementation

For the survey execution, we have followed the custom design approach (Dillman, 2000). This approach shows that surveys will achieve strong answer rates. The first communication is an email until notification. The pre-notice is constructive and timely to inform respondent that he or she is being asked to contribute by taking part in the inquiry. Sending an advance average increases the answer rate by about 5 percentage points (Dillman, 2000). The advance note was sent by the company manager and says shortly that the interviewees would obtain a survey, what the survey is all about, how helpful it is and finish with a brief thank vou letter.

Results

As described in the above sections, the questionnaire is used to collect the data, which is mentioned in the appendices, so in order to validate the collected data, following reliability analysis is used, the results of the analysis in table 1.1, Cronbach's Alpha values 0.907 which suggests a highly reliable data is collected. The number of item n=100 and KMO analysis shows a values of 0.869 suggesting the adequacy of the data collected through the questionnaire.

Table 1.1 Reliability Analysis

Reliability Analysis		
Cronbach's Alpha	0.907	
N of Items	11	
Valid	100	100
Excluded ^a	0	0
Total	100	100

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Table 1.2. shows the component's factor analysis, to validate the dimensions of the industrial economy, as the table shows, IE1,

IE2, IE3, IE4, IE5, and IE6 can be seen above from the standard 0.7 which suggests the excellent strength of the component analysis.

Table 1.2 Factor Analysis

Indu	strial Eec	conomy	,	
Facto	or Analys	sis		
	Mean	Std. Deviation	Analysis N	Component Loadings
IE1	2.41	1.09263	100	0.897
IE2	2.63	1.1777	100	0.787
IE3	2.74	1.23599	100	0.703
IE4	2.49	1.13258	100	0.705
IE5	2.57	1.1033	100	0.847
IE6	2.41	1.09263	100	0.897

Table 1.4 shows the component loadings for the second variable of the study (industrial economy) which are also higher than the Table 1.3 Factor Analysis

standard values suggesting highly good strengths of the components to support the variable.

Indus	strial Eec	onomy		
Facto	r Analys	is		
	Mean	Std. Deviation	Analysis N	Component Loadings
LE1	2.63	1.1777	100	0.861
LE2	2.74	1.23599	100	0.879
LE3	2.49	1.13258	100	0.909

Table 1.3 is to investigate the factor loadings of the exposure of COVID-19, which are also above from the 0.7 suggest good strengths.

Table 1.4 Factor Analysis

Industrial E	economy			
Factor Anal	ysis			
	Mean	Std. Deviation	Analysis N	Component Loadings
COV1	2.49	1.13258	100	0.875
COV2	2.41	1.09263	100	0.909

Correlation analysis is performed to investigate the significant relationship between the variables, it's been concluded that the higher the industries and labor force is exposed to COVID-19 lower their relative economy will be. The population of the china is used to conduct the analysis, which suggests in real-time that industries whose workforce in more vulnerable or exposed to covid is more likely to show less performance and profits as well. There is been a negative relationship exists between the study variables, with a significance below 5%.

Table 1.5 Correlation Analysis

Correlation Analysis				
	Expos	sure To COVID-19	Industrial Economy	Labor Econommy
Exposure To				
COVID-19	r	1		
	Sig.			
Industrial Economy	r	-0.48	1	
	Sig.	0.03		
Labor Econommy	r	-0.363	.523**	1
	Sig.	0.01	0.05	

Regression analysis

Regression analysis is used to investigate the impact factor, which clearly can be seen in figure below, the curves estimations for the impact of covid on the economy of industries Table 1.6 Regression Analysis

and labor shows a negative relationship. Beta results -0.70 for labor economy while -0.708 for industrial economy, showing a direct relationship between both the labor and industrial economy. Table 1.6 shows the regression results below.

		Labor Economi	my				
Model Summary	1		В	Std. Error	Beta	t	Sig.
R	.877a	(Constant)	5.376	0.248		21.69	0
		Exposure To			-	-	
R Square	0.769	COVID-19	-0.704	0.094	0.929	7.506	0
Adjusted R							
Square	0.743	Industrial Econ	ommy				
Std. Error of the		Exposure To			-		
Estimate	0.76335	COVID-19	-0.708	0.129	0.877	-5.47	0

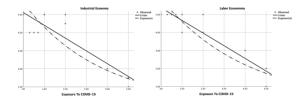


Figure 1.1 Curve Estimation

Discussions

A careful policy sequence is need for to tackle the economic, economic and social ramifications of this crisis(Douglas et al., 2020). Firstly, urgent stimulus measures are necessary to improve the healthcare sector while reducing the effects of financial relief for companies and incom e assistance for employees on the economies and labor markets. Ideally, timely and accurate evaluations of the effect of lockdowns on business growth, employment and households must guide these measures. 2 In order to promote sectoral responses, sectoral variances should be analyzed attentively. 3 The steps implemented included the provision assistance to employees and businesses in all sectors concerned in order to avert future consumer and investment contractions. One of the fundamental lessons learnt from previous crises is that job assistance and social protection should be a key component of stimulus packages (Menhat et al., 2021).

Secondly, after the viral spread has been limited and regular activity slowly returns, it will be necessary to adopt a demand-driven employment plan to restore jobs and revenues in a medium to long term way. This approach should encompass the promotion of jobs in important sectors; the restoration of a favorable business climate and the revitalization of productivity growth; economic diversification and structural change; and the optimal use of progress. The pace at which technology alleviated limitations may be without threatening public health, as well as the very real prospect of reintroduction of limitations if the infection rate begins to increase again, will contribute to consumer caution and limited investment by businesses. The combined impact of the latter is likely to result in decreased demand and reduced levels of output and employment(Sarkodie & Owusu, 2020). These alterations in behavior are likely to continue for a long time. The implementation of measures aimed at restoring consumer and corporate confidence, which is also needed to avoid economic depression and hasten recovery, is crucial to examine. While families and the private industry are likely to remain cautious, governments may play a key role by increasing demand in the building industry via stimulus packages centered on infrastructure, as was done in the past during earlier crises. The construction industry is very labor-intensive, its operations may be geographically focused with special economic difficulties, and this industry has a major percentage of local inputs in most nations. It is also quite easy to absorb personnel from different industries(Choi, 2020).

Not all nations are equally equipped to tackle these issues. Aside from lock-in effects and decreased global demand, emerging countries are seeing a further decline in their already restricted fiscal space due of declining fiscal incomes and increasing capital outflows. These increases borrowing costs and devaluations of currencies, compromising the sustainability of debt. 6 Countries facing instability, long-term wars, recurring natural catastrophes or forced relocation would have even more obstacles. Global assistance for national stimulus packages is needed to save lives in these nations, strengthen their economies and demand for labor, protect companies, jobs and incomes and protect employees at their workplace. The prompt and coordinated execution of financial markets may save lives, avert job losses and incom

e losses, and avert bankruptcy by enterprises and promote sustainable recovery(Estrada et al., 2020; Lim & To, 2021).

Accommodative monetary policies currently allow governments to alter their fiscal policies to assist the economy and provide considerable public funds to companies, employees and consumers to assist them in overcoming the early adverse effects of the economic crisis caused by the COVID-19 epidemic. Monetary policy measures should continue to be employed to relieve financial conditions and liquidity limitations, allowing governments the budgetary room needed to sustain continuity in business and family income.

Higher spending and forgotten income, public sector lending and equity infusions, and loan guarantees are included in the available fiscal policy options. Fiscal assistance is also supplied using 'automatic stabilizers' aspects of tax and benefit systems, such as wealth redistribution unemployment benefits, to stabilize and and consumption. All these incomes instruments are already deployed in reaction to the potential benefits and risks of the epidemic. Advanced economies may use a broad variety of mechanisms to help consumers and firms in the spending, tax and liquidity sectors. For example, numerous European governments have implemented liquidity lifelines for small businesses and self-employed entrepreneurs such as inexpensive loans or guarantees(Barua, 2020).

Emerging and emerging economies usually have less scope to react to problems in their budget. Debt relief or temporary suspension of payments are important to aid such nations to divert their precious financial resources more toward emergency medicines and other sorts of public assistance. The poorest nations should not decide to honor their debt commitments and safeguard their citizens, who represent two-thirds of the world's extreme poor(Chen et al., 2021).

Investment in public employment programs may be an important aspect of the response to the crisis in developing nations, in particular when such programs are customized to minimize COVID 19-related health concerns only when the public health situation permits. Without a solid social protection system, these actions can provide employment and income to many jobless and informal workers afflicted by

the crisis, allowing them to stay economically In addition, public employment active. programs may meet multi-sectoral requirements, including work. care environmental rehabilitation and community facilities. The first batch of stimulus packages continuing is not sufficient. Countries will require a medium-term recovery-oriented macroeconomic policy(Iyke, 2020; Shen et al., 2020). Following the most severe health emergencies and containment stages, direct government involvement will be essential. The impact of the crisis on energy prices, money flows, and trade and supply networks will make recovery more difficult for many nations. assistance International financial and coordinated monetary and fiscal policies will thus be critically vital in order to promote a global rebound that benefits both the poorest and most powerful nations. Even after a subsidized urgent health crisis, nations must continue to assist businesses, increase their labor market actions so as to get people back to work, and preserve social protection and social expenditure initiatives. Social spending has a more beneficial impact than other policies on the economy, and may contribute to social and political stability(Shen et al., 2020).

Conclusions

The study contributes into the special issue to shed light on challenges and development of China's economy. The population of the china is used to conduct the analysis, which suggests in real-time that industries whose workforce in more vulnerable or exposed to covid is more likely to show less performance and profits as well(Fang et al., 2021). There is been a negative relationship exists between the study variables, with a significance below 5%. The higher the industries and labor force is exposed to COVID-19 the lower their relative economy will be, it's been concluded that the higher the populations are the lower the relative economy of those industries. The study is the first of its kind to be published in the world and is considered an original study of its type. It is published by the journal Economic Research, a specialist journal in economics.

Policy Implications

To yet, federal help has been inadequate in distributing financial help to those who most need it. More than half of the coronavirus assistance goes to companies, many of which are not obliged to maintain their personnel or to demonstrate that the epidemic has a detrimental effect. Only approximately one fifth of them got directly to the employees and families, however, and the support was not always favorably received. Initial direct payments, for example, exclude children if they have one parent who is an immigrant who is illegally. Direct incentives were also given slowly, leaving millions of households waiting months to get their monies(Tian, 2021).

Although all unemployment insurance, PPP loans and other COVID-19 aid have been distributed as fairly as possible, people of color and of key workers in particular have an increased probability of being unemployed throughout general and are more likely to be living in the most important subway areas hit by recession because of COVID-19. The downturn will also not fade in the next years. Hispanic or Latino employees who lost their jobs during the epidemic may not even be able to find employment for months or years distribution of the last COVID-19 grant. There is also a considerable delay in the return of tourism. Because most Americans vaccinated, it may take several months to recover from foreign tourism and intimate contact among individuals. Excellent beginning points are stimulus expenditures and temporary assistance, but policymakers must actually listen to the sectors and the individuals that confront upliftment in the near future(Tian, 2021).

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Questionnaire

Industrial Economy

Current Impact
Indicate the level of agreement with the
following statements
1. Firms are partly/completely closedwhich is decreasing the industrial economy?
Strongly agree Agree Strongly disagree
2. Level of operations effected due to COVID-19 are taking part in decreasing overall profits? Strongly agree Agree Strongly disagree
3. Level of problems firms had to face which is enhancing the cost of operations?
☐ Strongly agree ☐ Agree ☐ Neither ☐ Disagree ☐ Strongly disagree
4. Indicate the level of effect on the survival and recovery rates on the firms growth?

☐ Strongly agree	Agree	Neither
Disagree	Strongly	disagree

Expected Impact

6.

5. Indicate the level of investment and environmental sustainability affected?

☐ Strongly agree ☐ Agree ☐ Neithe
☐ Disagree ☐ Strongly disagree
Indicate the level of effect due to changes to
regular operations and government policies?

Strongly agree	Agree	Neith
Disagree	Strongly of	lisagree

Labor Economy

1. Indicate the level of increment in the labor wages due to covid outbreak?

Strongly agree	Agree
Neutral Disagree	Strongly
disagree	

2.	Indicate the level of decrement in the
	availability of the labor force?
	Strongly agree Agree
	Neutral Disagree Strongly
	disagree
3.	Indicate the level of inability of labor to
	work effectively due to the health crisis?
	Strongly agree Agree
	Neutral Disagree Strongly
	disagree
Ex	posure to COVID-19
1.	Indicate the level of COVID-19 exposure
	your firm is currently facing.
	Strongly agree Agree
	Neutral Disagree Strongly
	disagree
2.	Indicate the current level of COVID-19
	exposure your workforce is currently facing.
	Strongly agree Agree
	Neutral Disagree Strongly
	disagree

References

- 4. Ahmad, M., Beddu, S., binti Itam, Z., & Alanimi, F. B. I. (2019). State of the art compendium of macro and micro energies. Advances in Science and Technology Research Journal. Volume 13, Issue 1, March 2019, pages 88–109 https://doi.org/10.12913/22998624/103425
- 5. Barua, S. (2020) Understanding Coronanomics: The economic implications of the coronavirus (COVID-19) pandemic.
- Bashir, M. F., Benjiang, M., & Shahzad, L. (2020) A brief review of socio-economic and environmental impact of Covid-19. Air Quality, Atmosphere & Health, 13(12), 1403-1409.
- 7. Chen, H., Qian, W., & Wen, Q. (2021). The impact of the COVID-19 pandemic on consumption: Learning from high-frequency transaction data. Paper presented at the AEA Papers and Proceedings.
- 8. Choi, S.-Y. (2020) Industry volatility and economic uncertainty due to the COVID-19 pandemic: Evidence from wavelet coherence analysis. Finance research letters, 37, 101783.
- 9. Debata, B., Patnaik, P., & Mishra, A. (2020) COVID-19 pandemic! It's impact on people, economy, and environment. Journal of Public Affairs, 20(4), e2372.
- 10. Denzin, N. K., & Lincoln, Y. S. (2008). The landscape of qualitative research (Vol. 1): Sage.
- Douglas, M., Katikireddi, S. V., Taulbut, M., McKee, M., & McCartney, G. (2020) Mitigating the wider health effects of covid-19 pandemic response. Bmj, 369
- 12. Estrada, M. A. R., Koutronas, E., & Lee, M. (2020) Stagpression: The economic and financial impact of Covid-19 Pandemic. SSRN Electron. J.
- 13. Fang, J., Collins, A., & Yao, S. (2021) On the global COVID-19 pandemic and China's FDI. Journal of Asian Economics, 74, 101300.
- Gliner, J. A., Morgan, G. A., Harmon, R. J. J. J. o. t. A. A. o. C., & Psychiatry, A. (2000) Single-subject designs. 39(10), 1327.
- 15. Iyke, B. N. (2020) Economic policy uncertainty in times of COVID-19 pandemic. Asian Economics Letters, 1(2), 17665.
- 16. Khalid, U., Okafor, L. E., & Burzynska, K. (2021) Does the size of the tourism sector influence the economic policy response to the COVID-19 pandemic? Current Issues in Tourism, 1-20.
- 17. Lim, W. M., & To, W.-M. (2021) The economic impact of a global pandemic on the tourism economy: the case of COVID-19 and Macao's destination-and gambling-dependent economy. Current Issues in Tourism, 1-12.
- Menhat, M. N., Zaideen, I. M. M., Yusuf, Y., Salleh, N. H. M., Zamri, M. A., & Jeevan, J. (2021) The impact of Covid-19 pandemic: A review on maritime sectors in Malaysia. Ocean & Coastal Management, 105638.
- Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., Iosifidis, C., Agha, M., & Agha, R. (2020) The socio-economic implications of the coronavirus

- and COVID-19 pandemic: a review. International journal of surgery.
- 20. Osotimehin, S., & Popov, L. (2020) Sectoral Impact of COVID-19: Cascading Risks. Federal Reserve Bank of Minneapolis Opportunity and Inclusive Growth Institute Working Paper(31).
- 21. Ozili, P. K. (2020) Covid-19 pandemic and economic crisis: The Nigerian experience and structural causes. Journal of Economic and Administrative Sciences.
- Pan, W., Huang, G., Shi, Y., Hu, C., Dai, W. q., Pan, W., & Rongsheng, H. (2021) COVID-19: Short-Term Influence on China's Economy Considering Different Scenarios. Global Challenges, 5(3), 2000090.
- Phillipson, J., Gorton, M., Turner, R., Shucksmith, M., Aitken-McDermott, K., Areal, F., Cowie, P., Hubbard, C., Maioli, S., & McAreavey, R. (2020) The COVID-19 pandemic and its implications for rural economies. Sustainability, 12(10), 3973.
- Ruiz Estrada, M. A., Koutronas, E., & Lee, M. (2020) Stagpression: The economic and financial impact of Covid-19 Pandemic. Contemporary Economics, 15(1), 19-33.
- 25. Sarkodie, S. A., & Owusu, P. A. (2020) Global assessment of environment, health and economic impact of the novel coronavirus (COVID-19). Environment, Development and Sustainability, 1-11.
- 26. Shen, H., Fu, M., Pan, H., Yu, Z., & Chen, Y. (2020) The impact of the COVID-19 pandemic on firm performance. Emerging Markets Finance and Trade, 56(10), 2213-2230.
- Škare, M., Soriano, D. R., & Porada-Rochoń, M. (2021) Impact of COVID-19 on the travel and tourism industry. Technological Forecasting and Social Change, 163, 120469.
- 28. Susilawati, S., Falefi, R., & Purwoko, A. (2020) Impact of COVID-19's Pandemic on the Economy of Indonesia. Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences, 3(2), 1147-1156.
- 29. Tian, W. (2021) How China managed the COVID-19 pandemic. Asian Economic Papers, 20(1), 75-101.