IMPACT OF COVID-19 ON ECONOMY OF PAKISTAN

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ABSTRACT

The Covid-19 Pandemic has affected the economy of Pakistan very much. The aim of this study is to estimate the overall economic contraction of Pakistan due to pandemic and lockdown measures. It also tells us that how we should keep our self well-prepared for the stability of the economy of the country in case of unforeseen pandemics and other natural disasters. The research was made using GDP, per capita GDP, GNI, un-employment rate, inflation rate, HDI and net exports as our independent variables. The sampled data of these variables were collected from the reliable sources like State Bank of Pakistan, World Bank, International Monetary Fund (IMF), Statista, and Statistical Bureau of Pakistan. The sampled data was then analyzed to check the overall economic condition of the country. In this research we have used secondary data from various reliable sources and analyzed the collected data using descriptive analysis, and regression analysis tests in SPSS software. The analyzed data is of quantitative nature. The study concluded that the current covid-19 pandemic has severely damaged the economy of Pakistan and many businesses were closed as they cannot bear the circumstances aroused due to the Covid-19 pandemic. The study tells about the estimated loss due to pandemic and also reveals that which economic indicators was more affects the economy during the pandemic. This paper elaborates the effect of pandemic on the economic growth only and does not elaborate anything about the economic development of the country. The research was conducted to estimate the current downfall in the economic growth of the country due to pandemic. Further research can be made using this research to check that how long it does take to stabilize the economy.

Keywords: Covid-19, Economic Indicators, Pakistan, Pandemic, Regression Analysis.
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1. INTRODUCTION

1.1. Background Information

In December 2019, an escalating breakdown of fierce disease was reported in the Chinese province, Wuhan. The disease was spreading fast among the people of Wuhan but the cause of disease was not known. With the passage of time, the number of confirmed cases were increasing in Wuhan. Later on, when disease was analyzed, the scientists came to know that it was caused by novel corona virus which spreads rapidly (Usman, Ali, Riaz, Riaz and Zubair, 2020). Soon, the World Health Organization realized the severity of this disease and proclaimed that it spreads rapidly, and its life period is approximately eight hours in air (WHO, 2020). The disease was continued to spread all over the world. After analyzing the depth and venomous of this disease, many countries around the world foist rigorous migration policies to prevent their people from this fatal virus. On March 2020 the WHO declared the disease as "Pandemic". The disease was spreading very fast, and the number of deaths was threatening the world. That is why different states took immediate steps to control and minimize its fatalness. In that worsened situation the country wide lockdown was imposed, and different techniques were also applied like face mask, use of hand sanitizers, social distancing and smart lockdown which were proved to be very effective and exemplary (Mishra, 2020). So almost all countries including Pakistan announced and motivated people to act upon such precautionary measures. That was the one angle of the story but at the same time the situation of the people was more serious and worse in earning their lively hood. Governments were also known that the result of lockdown was frightful and starling in economical point of view. Due to lockdown many strong economies were vacillating. The economic crises due to COVID-19 seemed to be alarming. It was narrated by Asian Development Bank that the GDP of the world was affected from 6.4% to 9.8% because of COVID-19 and could cost 5.8 to 8.8 trillion US Dollars to the global economy (ADB, 2020). Different economies including world top economies like USA, UK, Germany, Japan, and China were shrinking and according to a report published by UNCTAD there is a dire need of 2.5 trillion US Dollars to cope the damages caused by virus (UNCTAD, 2020). The lockdown strategy was proved to be very effective but due to this many people had lost their jobs. According to International Labour Organization (ILO), globally there were about 25 million people who had lost their jobs and their remuneration was expected to be 3.5 trillion US Dollars (ILO, 2020). The World Bank also warned that the growth of the world could shrink by 8% approximately and the disease could leave deep scars on the world's economy (May, 2020).

1.2. Impact of COVID-19 on Pakistani Economy

When Imran Khan Regime took power in 2018, the estimated GDP of Pakistan was 314.568 billion US $ (World Bank, 2020a). The major sectors that contribute to the economy of Pakistan are services sector, industrial sector, and agriculture sector. Most of the WAP belongs to the agriculture sector but this sector contributes only 24% in the total GDP. In industrial sector major industries includes textile and cotton industry, fertilizer, paper products, pharmaceutical, surgical instruments, construction material and sports industries contribute 21.7 % in GDP. Among these, cotton industry is considered to be the biggest industry

contributing 61% in total exports of Pakistan (Shafi, Liu and Ren, 2020). All these sectors of economy were contributing a lot in GDP of Pakistan but due to the arrival of venomous corona virus in Pakistan, these sectors also vacillated and Pakistani economy was destroyed. The World Bank reported that the economy of Pakistan was estimated to be declined from 1.9% in fiscal year 2019 to 1.5% in fiscal year 2020. It means that the GDP was lessened by 0.4% due to COVID-19 restrictions. World Bank further narrated that the services sector was contracted by 1% but industrial sector was estimated to be shrank by more than 1%. Agriculture sector surprised us because in the presence of rigorous lockdown and restrictions instead of contracting it was expanding greatly (World Bank, 2020b). Due to COVID-19 restrictions many industries were closed their operations and many of the employees who were working in these industries had lost their jobs. In such a catastrophic situation poor people who were already living from hand to mouth also faced challenge of earning money to feed their families.

1.3. Objective & Scope

This study tells us about the estimated economic loss due to Covid-19 pandemic. The effect of key economic indicators on the overall economy was elaborated in this study. These affects explain that how economic growth was suffered by the Covid-19 pandemic and the lockdown measures. The study tells us about the economic growth only while the economic development was not evaluated in this study. All the major losses that were related to net exports, GDP and GNI are clearly explained in this paper furthermore the rise in inflation rate and un-employment rate due to economic losses is also explained in the paper. While on the other hand the standard of living of people did not fall in the scope of this study and that is why it was not studies in this research, but it may be considered by researchers in future research.

1.4. Purpose

The lockdown strategies by different countries of the world put serious effect on the economic growth and development of different countries including Pakistan. The top economies of the world were also deteriorated due to COVID-19 measures, so there is a dire need to study that how COVID-19 related strategies and policies by different countries had affected their economic statuses. By having such research, we can formulate new theories, get an idea about the new methods of economic development. This study will also teach us how we should respond in such type of unforeseen global pandemics. How we will retaliate and how should we plan to protect the economy of the country not to crash. This article may be beneficial for the policy makers who design economic policies of the country. Students also seek knowledge from this research to derive other research.

2. LITERATURE REVIEW

Pandemics have been discussed extensively in literature (Asghar, Batool, Farooq & Hafeez-ur-Rehman, 2020; Fernandes, 2020; Kalogiannidis, Chatzitheodorithis, & Kontas, 2020). Many pandemics have observed in the recent past like SARS and MERS that not only causes economic destruction but also takes lives of people (Asghar et al, 2020). Asghar et al,

(2020) have carried out a study on COVID-19 to examine its impact on the economy of Pakistan and they found that Pakistani government announced different packages to facilitate the poor. Furthermore, Ilyas, Azuine and Tamiz (2020) have discussed the problems of the people during COVID-19, and they found that the people of Pakistan were facing poverty, illiteracy, and many other issues due to the present pandemic. Later, Fernandes (2020) performs a study and found that the economic deterioration due to previous pandemics are less grievous then the current COVID-19 pandemic. He also observed the depression in the world economy due to past pandemics.

Kalogiannidis et al, (2020) performed research and found that how COVID-19 spreads in different countries and how it affects their economies. The COVID-19 pandemic has excruciating effects on the economy and lives of people. The disease started from Hubei province of China and has reached to 188 countries of the world till yet. According to Freedman the COVID-19 breakout was highly experienced in the last year i.e. 2020. He studied the patterns of spreading of virus globally and further concluded that in the previous year it was spreading exponentially in almost all the countries of the world thus, 2020 is known as the year of COVID-19 as every activity was hindered because of this disease (Freedman, 2020). The first two cases of COVID were confirmed by special Assistance to Prime minister on health on 26th of February. Both patients of this disease had visited Iran recently. On 2nd of March five new cases were reported in Pakistan and at the end of the month March the number of confirmed cases went to 2,039 with 26 deaths (Ilays et al, 2020). The disease was spreading continuously, and it had noticed that the number of confirmed cases had reached to 10,000 on 22nd of April but the most starling thing was that, in the next 11 days more 10,000 cases were confirmed by the authorities. The numbers of confirmed cases were growing fast and the only reason behind this was that people had lack of knowledge and information about virus, so it was not possible to made good strategies and policies for its prevention (Asghar et al, 2020). Ali, Imran, and Khan (2020) together performed a study about the mortality rate by COVID-19 pandemic and stated that during the starting days of the pandemic the mortality rate in the country was estimated to be very high (about 6%). This rate was estimated on the basis of the patients that came to hospitals for treatment, but it was also observed that many people did not go to any hospital or clinic to take medical checkup and their mortality rate was about 2% to 3% approximately. This rate was not added in the government gross mortality rate.

Rasheed, Rizwan, Javed, Sharif & Zaidi, (2020) carried out a research and present the statistics about the confirmed cases, recoveries, and deaths. They also shown us the overall economic loss (i.e. 1.1 Trillion Pakistani Rupees) that Pakistan had faced due to COVID-19 pandemic. Their research shows that the situation was so worsened that there were about 420,294 confirmed cases of the disease out of which 6,523 people had died and only 8,588 were recovered so far as on October 9, 2020. National Institute of Health conducted a survey about province wise reported cases of COVID-19 and publishes a report according to which the most targeted province by this virus is Punjab with 38.11 % cases out of total. The share of province Sindh, KPK and Balochistan was around 35.27%, 15.74%, and 6.83% respectively. Despite

these statistics if we talk about the deaths percentages then the share of Punjab is less (30.9%) than KPK (35.76%) but more than Sindh (28.31%) (National Institute of Health, 2020).

According to IMF, the economic status of Pakistan before pandemic was already not very good. The GDP of Pakistan was recorded to be 2.4% by IMF and the inflation rate was also observed to be very high before the breakout of COVID-19 (IMF, 2019). Furthermore, World Bank also claimed that the Pakistani economy had been facing many economic problems for many past years that were related to trade and budget deficit i.e. twin deficit. But due to the COVID-19 breakout different measures were taken to prevent its spreading that had negative impact on the business and economy of the country. The GDP of the country was recorded to be declined by 0.4 % and it was in negative numbers at the end of the FY 2020 (World Bank, 2020).

UNCTAD publishes a report that shows the repercussion effect of Chinese economy on Pakistan. According to this report, when the economy of China was disturbed, it had repercussion effect on Pakistani economy i.e. Pakistani economy also vacillates and textile and apparels sector which is one of the largest sector of Pakistani economy faced a financial loss of about 44 Million US$ (UNCTAD, 2020). UNCTAD further stated that many foreign countries particularly European countries who had given different consignments to Pakistani exporter firms asked them to stop manufacturing goods and cancel shipments due to which a great financial loss and lower net exports of Pakistan had been expected. Major portion of population of Pakistan (about one-third) was already living below poverty line as narrated by UNCTAD. Due to COVID-19 breakout many strong economies strongly vacillated and at the same time due to globalization all the economies were inter-related to each other that is why their vacillation had spillover effect on Pakistan which ultimately results in increasing poverty rate approximately by 40% till June 2020 (UNCTAD, 2020).

Waheed, Salman, Sarwar and khan (2020) conducted research by using quantile coefficients to check the effect of COVID-19 on stock market and showed us that there exists a direct relationship between stock market (KSE) and COVID-19 spreading. They reported that as the COVID-19 cases were started growing the stock market also started declining and the trading in the KSE had stopped in March because an immediate decline in (KSE) 100 index. When the cases were increasing rapidly the investors started withdrawing their investments from stock market and the foreign volume of investment which was calculated to be 3.5 billion dollars in the last couple of years were withdrawing by investors and around 2 billion dollars investments in KSE were withdrawn by the investors in just two weak. They also observed a great downfall in the 100-index of KSE that was not witnessed in the last five-year history of KSE. Kursheed and Khan carried out a study on COVID-19 related impacts on GDP and electricity consumption and reveals that the impact of the pandemic will not vanishes in 2020 but they will continue till some future years. It is estimated by the researchers that COVID-19 has long term effects on the economy and the GDP growth will lessen by about 1.32% in FY 2021 and the affects will continue for next four years with an average decline of 1.25%. Furthermore, they also narrated that due to reduction in electricity consumption, its demand

decreased causes a financial loss of 23,458.3 US Dollars to the GDP (Khursheed and Khan, 2020).

3. METHODOLOGY

3.1. Introduction

The main accentuation of this study is to analyze and judge the stringent effects of Covid-19 pandemic and lockdown phases during pandemic on the overall economic condition of Pakistan. The study also reveals that how exacerbation in the pandemic causes downfall in the economy. We analyze all these effects by ruminating the key economic indicators during the pandemic and lockdown phases.

3.2. Research Approach

In our study, we use qualitative as well as quantitative approaches. The qualitative approach focuses on the literatures and facts that were elaborated in the studied literatures and did not include any statistical tool and we analyze all the key points of different literatures, reports, web sources to estimate the impact of Covid-19 pandemic on the Pakistani economy, whereas; on the other hand the quantitative approach focuses on the collection of quantitative data from reliable sources and for the analysis of the collected data we have used different statistical tools and then conclude results accordingly. The result of statistical techniques tells us the quantitative facts that are helpful for us in deriving the final conclusions and recommendations of our study.

3.3. Research Purpose

The basic purpose of this study is to investigate the effect of Covid-19 on the economic growth during the period of Covid-19 in Pakistan. The study tells us that whether the economy of Pakistan was affected by Covid-19 and lockdown measures or not? And if effected then how much the economy was affected? The study also tells that whether the key economic indicators that were used in this study are helpful in investigating the economic growth or we have to use other independent variables for this kind of investigation. This study is also meaningful for the researchers and scholars who will study related topics. By having this study, it is possible for us to give recommendations and suggestions regarding the pandemic affects and future economic forecasting.

3.4. Research Design

In research design, there are two ways through which we performed the research and analyzed the data, figures, and facts. We used descriptive analysis to understand that which economic indicators was showing negative results during pandemic as compared to fiscal year 2019 (before pandemic situation) and which one was showing positive results. So, by having analysis in this way we can easily judge that whether a particular economic indicator was affected by the Covid-19 pandemic and lockdown measures or not and if anyone was affected

than how severely it was affected. Secondly, we analyzed the relationship between the economic growth during a particular fiscal year and the key economic indicators by using correlation and regression analysis tests.

3.5. Sample Selection and Data Collection

As the Covid-19 pandemic starts spreading from December 2019 in China's Wuhan and came in Pakistan in between February and March but the Covid-19 pandemic starts effecting Pakistani economy from December 2019 because Pakistan has an international border with China where many trade activities were being performed and secondly the economy of Pakistan is directly linked with the economy of China because of CPEC and many other MoU's that were signed between both countries. Thus, considering all these facts we selected our sample from December 2019 to April 2021 because the aim of the paper is the estimate the overall effect of pandemic on the Pakistani economy, so it is better to select the sample from the starting phase of Covid-19 pandemic to the current period. The major economic indicators are very helpful in determining the economic condition of any country (Asghar, Batool, Farooq and Rehman, 2020) so in this case we also select the sampled data of key economic indicators from December 2019 to April 2021 to check the impact of pandemic on economy.

We have collected secondary data in this research and use key economic indicators as our variables. We have spent two weeks in data collection. The data gathered from the starting phase of covid-19 i.e from 2019 to April 2021 from many agencies including State Bank of Pakistan, International Monetary Fund (IMF), World Bank, Statista, Statistical Bureau of Pakistan, Pakistan Stock Exchange (PSX) and Dawn. The nature of our data is quantitative because we were to analyze the economic health of Pakistan before Covid-19 pandemic and after Covid-19 pandemic through the economic indicators and these indicators shows results in quantitative form, so we needed quantitative data for this purpose.

3.6. Statistical Technique

In this research we analyze the direct effect of our independent variables i.e. GDP, per capita GDP, GNI, Inflation rate, HDI growth, Un-employment rate, Foreign exchange Reserves and net Exports and on our independent variable i.e economic growth. We use descriptive analysis, correlation analysis and regression analysis techniques in this research and after collection of data from 2019 to 2021, we formulate a spread sheet and arrange our data on that sheet. The software we used for analysis is SPSS. We put our records in SPSS and then run above mentioned statistical tests to investigate whether there is a downfall in the economy, or the economy is growing in a good manner.

3.7. Methodological Limitations

This study is very helpful in estimating the overall economic loss faced by the country due to pandemic and lockdown measures but still there are certain methodological limitations present in it. The data was collected on annually basis because some variables like HDI, GNI, and GDP cannot be computed on monthly basis while on the other hand variables like net

exports, un-employment rate, inflation rate also show statistics on monthly basis that are more reliable, but these were also collected on annually basis for analyzation. Furthermore, the values of HDI, GDP and GNI for the fiscal year 2021 are not real values, as these values will be computed after fiscal year 2021. These are the expected values collected as secondary data from the literature.
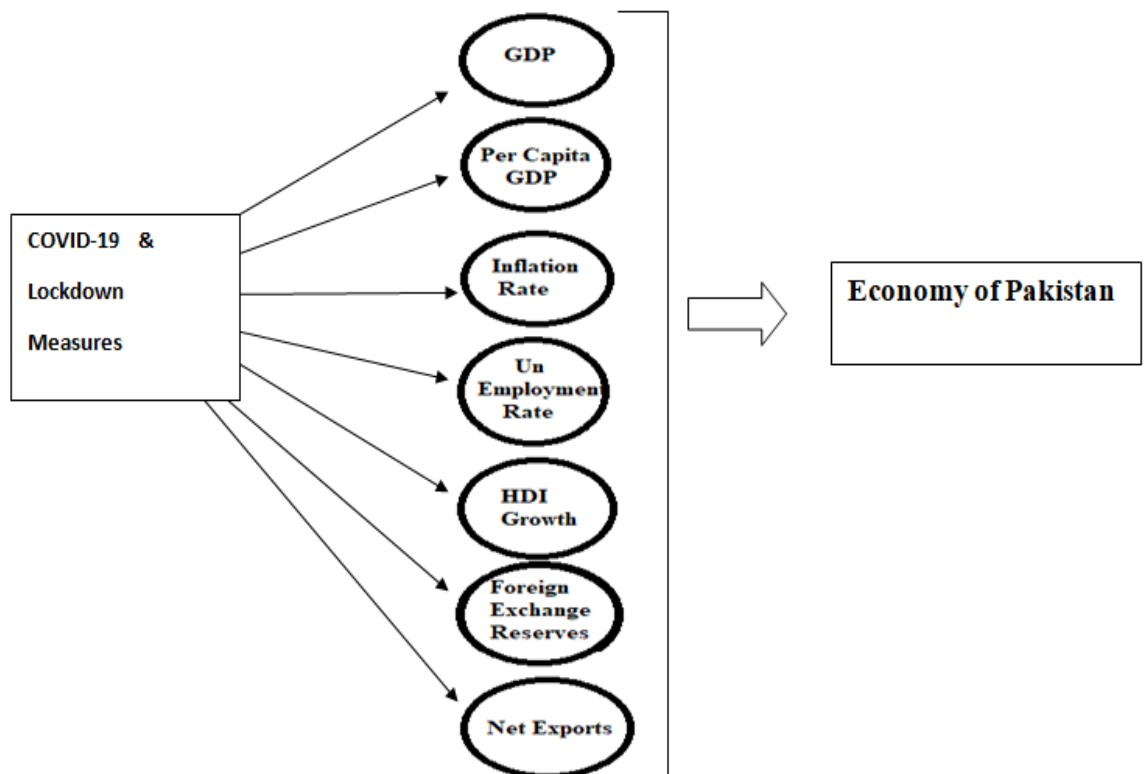
3.8. Model

Figure 1. Model

Theoretical/Practical Framework

In this study we have collected data of key economic indicators from 2019 to April 2021. We have used GDP, per capita GDP, GNI, un-employment rate, inflation rate, HDI and net exports as our independent variables and economic growth of the country as our dependent variable. We checked the effect of all these key economic indicators on the overall economic growth of the country considering that any change in these economic indicators effects the overall economic growth of the country.

The regression model was formulated as;

$$\text{Economic growth} = \alpha + \sum \beta i X \varepsilon it \qquad (1)$$

Where

α = shows the intercept of the model

βi = presents the coefficients

Xit = exhibits the independent variables

The GLS regression model after using various independent variables is:

Economicgrowthit = α + β1 GDPit + β2 PercapitaGDPit + β3 GNIit + β4Unemployementrateit + β5 Inflationrateit + β6 HDIit + β7 Foreignexchangereservesit + β8 Netexportsit + εit   (2)

Table 1. Operational Definitions:

Variables	Measurements
Economic Growth during Covid-19 Period	Economic status (growth or downfall) of Pakistan during the period of Covid-19 in Pakistan.
GDP	The Gross Domestic Product in Billion US Dollars.
Per Capita GDP	Per capital GDP during the year in US $.
Inflation Rate	Inflation rate in percentage corresponding to previous years.
HDI Growth	It tells us the "Human Development Index" for a particular year.
Un-Employment Rate	It is the Number of labour force employed to the total labour force in percentage.
Foreign Exchange Reserves	Foreign exchange reserves held by the country during a particular year in Million US Dollars.
Net Exports	Total exports minus imports in Million US $.

4. FINDINGS

Table 2 shows the results of the descriptive analysis. It shows the minimum and maximum values of economic indicators during the covid-19 period and their mean and standard deviation values respectively.

Table 2. Descriptive Statistics

Particulars	Minimum	Maximum	Mean	Standard Deviation
Gross Domestic Product of a year in Billion $	262.80	294.32	278.4400	15.76137
GDP per person in USD	1260.010	1543.000	1362.57000	156.743860
Gross National Income of a year in Trillion USD	1.000	1.039	1.02033	.019553

Inflation rate of a year in %	6.74	10.74	8.7133	2.00053
Unemployment Rate of a Year in %	4.45	9.56	6.3367	2.80500
Human Development Index of a year	.540	.557	.54900	.008544
Foreign Exchange Reserves holding by country in Million USD	15722.60000	22689.80000	19050.3000000	3494.04971201
Net Exports of a year in Billion USD	20.99300	24.25700	22.5953333	1.63280873

4.1. GDP

GDP is considered as one of the best indicators for the judgment of economy of any country. GDP of Pakistan was observed to be decreased from 278.2 billion US $ in 2019 to 262,8 Billion US $ in year 2020 which indicates that due to Covid-19 and lock down measures the gross domestic product of the country shows downfall as compared to FY 2019, but as Covid-19 pandemic situation seems better in year 2021 so, the GDP of the country is assumed to be increased, as estimated by researchers. The relation between GDP and economic growth was analyzed by regression analysis for the period of 2019 to 2021 and found that the economic growth was influenced due to the change in the GDP to some extent. The results of regression test show us that the value of R is 0.511 which means there is a nominal relationship between GDP and the economic growth for the fiscal years 2019, 2020 and 2021. However, the value of R square is 0.262 which means that if there is a change in GDP occurs then it will influence the overall economic growth to just 26.2 %. The results further show us that the level of significance for the GDP is .658 which means that our hypothesis i.e "GDP has great influence on the overall economic growth" is not significant at all. Both GDP and economic growth are not correlating in our study.

4.2. Per Capita GDP

The per capita GDP tells us that how much a single individual contributes to the total GDP of the country. As overall GDP decreased in FY 2020 compared to FY 2019 so, in the same manner the per capita GDP also decreased from 1284.7 US $ in FY 2019 to 1260.01 US $ in FY 2020 but the per capita GDP is seemed to be increased in year 2021. In our study the per capita GDP and economic growth for the fiscal years 2019, 2020 and 2021 are relating with each other to a very great extent as evident from the value of R in regression test. Furthermore, the value of R square indicates that any change in per capita GDP will affect the economic growth to about 67.9 % but again this hypothesis is not significant as the level of significance for this case is 0.384. Thus, we can say that in our study the hypothesis that "per capita GDP has an influence on the overall economy" is not significant.

4.3. Gross National Income (GNI)

Gross national income is also a best indicator for evaluating the overall economic progress of the country during a particular period of time. If we talk about the results of descriptive analysis, then we come to know that the value of GNI in 2019 is 1.039 trillion US $ which decreases to 1.0120 trillion US $ in FY2020 and the expected value of GNI is 1.000 trillion US $ in FY 2021. Thus, we can say when the country was facing Covid-19 pandemic and lockdown phases then at the same time the gross national income generated by the country decreases. So, the GNI of the country was affected very much due to Covid-19 pandemic and lockdown strategy which ultimately became the cause of shrinking of the economy. According to our correlation and regression analysis results both gross national income and economic growth are correlating with each other to a very great extent. The value of R indicates that there is a strong relationship between our dependent variable i.e economic growth and our independent variable i.e gross national income. However, the value of R square indicates that if any change occurs in the value of GNI then it will affect the economic growth to about 99.5 %. Furthermore, we can conclude that our hypothesis that "any change in GNI will affect the overall economy" is correct as the level of significant is .047 which is significant at $\alpha = 0.005$.

4.4. Inflation Rate

Inflation rate of any country is very useful in predicting the overall economic strength of a country. The descriptive analysis shows us that due to Covid-19 pandemic and lockdown measures the inflation rate of the country jumps from 6.74 in 2019 to 10.74 in FY2020 and 8.66% in 2021 till April, it means that with the increase in the inflation rate the economic condition of the country vacillates. However, correlation and regression analysis show us that both variables i.e economic growth and inflation rate correlates with each other to a very little extent as evident from the value of R i.e .480 while the value of R square shows that any change in the value of inflation rate will affect the overall economic growth to just 23 %. At the same time this hypothesis is not significant as the level of significance is 0.681.

4.5. Unemployment Rate

The unemployment rate tells us the number of people unemployed from the total number of people of the labour force in any country. The descriptive analysis shows us that the unemployment rate jumps from 4.45 in 2019 before Covid-19 pandemic to 9.56 in FY2020 which means that due to Covid-19 pandemic and lockdown measures many people had faced unemployment. The expected un-employment rate for the FY2021 is about 5% which is also greater than the rate of FY2019. This clearly states that many people were unemployed due to pandemic and that is why they can't generate the minimum income needed for their survival. The regression and correlation analysis shows that both the unemployment rate and economic growth relates very lightly to each other as the value of R for regression test in this case is .098 which is very low similarly the value of R square shows us that any change in the value of unemployment rate will affect the economic growth to just 10 % and at the same time the value of significant level is very high i.e 0.937 which indicates that the hypothesis that

"unemployment rate arise during Covid-19 pandemic affects the economic growth" is not significant.

4.6. Human Development Index

The value of human development index tells us about the economic development in any country or region. The index for the year 2021 was unknown at the time of research but if was estimated using previous indexes. The index was also estimated by considering the Covid-19 situation in the year 2020 thus, the estimate was made according to FY 2020 index and covid-19 situation in FY 2020. After having the descriptive analysis results from the estimated data, we can say that the value of Human Development Index increases from .54 to .557 while if we talk about the mean index during the pandemic years then it is .549 which is also greater than FY 2019 index thus, it is clear that Covid-19 pandemic did not affect the value of HDI as much. However, the regression analysis and correlation analysis show us that the value of R is .410 which means both the variables relates to each other to very small extent similarly the value of R square is .168 which means that if any change occurs in the value of HDI then it will affect the overall status of economy of the country to just 16.8 %. The results also show us that this hypothesis is no significant at all as the significant level is 0.731.

4.7. Foreign Exchange Reserves

The financial strength of a country and its economic status can be judged through the foreign exchange reserves held by that country. Foreign exchange reserves are also very important for any nation because it is one of the major key economic indicators that tell how strong or weak a particular economy is? In our study the foreign exchange reserves of the Pakistan increases from 15722.60 million US $ in year 2019 before Covid-19 to 22689.80 million US $ in year 2021 during Covid-19 pandemic which indicates that the overall economic condition of the country was not affected very much by this pandemic. The regression analysis also shows us that there is strong relationship between both variables i.e economy and foreign exchange reserves as evident from the value of R i.e .9997. However, the value of R square shows us that if any change occurs in the value of foreign exchange reserves, then it will affect the overall economy to about 99.4%, moreover, this hypothesis is also significant at $\alpha = 0.005$.

4.8. Net Exports

The economic status of a country can also be predicted by its net exports. In our research we analyzed the net exports and found that net exports of the country before Covid-19 pandemic is about 24.25 Billion US $ in 2019, however, the worth of net exports of the country decreases and falls to 22.536 Billion US $ in FY 2020 and further reduces to 20.99 Billion US $ in year 2021 till April which indicates that Covid-19 pandemic has shrunk the net exports to a very great extent which ultimately shrunk the economy of Pakistan. The descriptive analysis shows us that the mean net exports of the country from FY2019 to 2021 was 22.5954 billion US $ which is less than the net exports of FY 2019, that is also the indication of shrinking of the economy due to downfall in the net exports. The regression analysis in this case shows that the

value of R is 1.00 which means net exports and economy are totally relating to each other however if any change occurs in the values of net exports, then it will affect the economy to about 99.8% as evident from the value of R square. This hypothesis is significant at α=0.002 or 2%.

Qualitative Findings

The discussed and studied literature shows us that the Covid-19 pandemic had imposed serious effects on the economic growth and economic development of the country. Almost all the sectors of the economy were vacillated due to pandemic. Many economic sectors were analyzed in the study and found that the overall economy of Pakistan was becoming weak in fiscal year 2020 as compared to fiscal year 2019 and the only reason for this is that due to pandemic the government of Pakistan had imposed lockdown in the country due to which the operations in almost all the economic sectors had stopped for the lockdown phase. It was also found that the year 2020 was most affected from the pandemic as the pandemic was on peak in year 2020 but as the situation was seemed to be better in year 2021, the economic health of the country was also observed better in April 2021 than April 2020. It was observed that when the business operations were stopped many people became unemployed due to which they did not able to generate the minimum income needed for their survival and at the same time the inflation rate of the country was also on its peak as net exports of the country was decreased and GNI was also observed to be less than previous couple of years therefore many people were found under the poverty line and this qualitatively proved that GDP of the country was affected negatively due to Covid-19. Thus, we can conclude that if GDP and exports were found decreased whereas un-employment rate and inflation rate were found increased from this discussion then it is obvious that the economic growth and economic development of the country was contracted.

5. DISCUSSION AND CONCLUSION

The Covid-19 pandemic situation urged the governments of different counties that they should imposed lockdowns in their countries. Pakistan also faced serious issues related to the spreading of the pandemic that is why the Pakistani government also decided to impose country wide lockdown. Due to this initiative where the spreading of disease was found to be controlled there the economic issues were also generating. The services sector was much affected as people who used to provide different kinds of services were remained at their homes due to lock down and did not contribute to the GDP and GNI of the country for the lockdown period this proved that the un-employment in the country increases, while our results of descriptive analysis also shows us that the un-employment rate increases in the country. The exports of the country were also seemed to be affected by the pandemic as the UNCTAD report shows different losses that Pakistani economy had faced due to pandemic and lockdown and many of the losses were related to the exports of the country. It was found that the text tile and apparels sector that was one of the major area of exports shows great downfall in the exports during Covid-19 as the operations of industries relating to this sector were stopped due to lockdown and that's why the exports of the country falls while on the other hand Pakistan was not in that condition in which

it can exempt any of its imported item so the net exports of the country falls and at the same time the GDP falls because exports were decreasing due to stopped operations so, where the business operations were halted there it is not possible to produce anything that's why contribution towards GDP was nothing thus, it affected the overall economy of the country. Furthermore, the study also reveals that the inflation rate of the country arises during the days of pandemic so, where the un-employment arises, GDP falls, and people were not able to generate minimum income required for their survival there if inflation rate also increases then it pushes thousands of people under the poverty line. In that worst situation where many people were under the poverty line there the economic condition of the country was also affected very much. As the key economic indicators that were studied and analyzed shows that the economy which is also not very good in 2019 was vacillated much in 2020 due to the Covid-19 pandemic situation and lockdown measures but as the condition seemed better in the first quarter of FY 2021 in which many people were successfully vaccinated and number of Covid cases were also decreasing that's why the economy was also stabilizing and according to the statistics of the economic indicators like GDP, GNI, foreign exchange reserves, un-employment rate, inflation rate and net exports the economic health of the country was improving greatly as compared to fiscal year 2020 in which pandemic was on its peak.

The study completely aimed to explore the effects of Covid-19 pandemic on the economy of the country. This study completely describes the effects of pandemic and the strategies used by the government for the prevention of its spreading on the overall economy of the Pakistan by analyzing the key economic indicators. After having this research, it is suggested that the government should focuses on the projects in which loans and financial help schemes will be introduced for the entrepreneurs so that with this initiative the economy which was contracted by the pandemic will grow effectively and the country will be moving towards the economic development. The government authorities related to IT department should think about the self-employment plans for the youth so that by having necessary training the youth of the country will be self-employed and thus, the un-employment rate will be decreased and the GNI contribution from youth will increase, and the economy will be flourished. Furthermore, the government should prepare the country for the future natural disasters like this pandemic so if any disaster will be faced by the economy in the future, then the country will be well-prepared and necessary precautionary measures will be taken but considering that those measures will not affect the economy, as during this pandemic the lockdown measure had affected the economy very much.

During this research it was found that the people of Pakistan has faced frictional un-employment first when the government has imposed lockdown and restrict the business operations but as time passes this frictional un-employment was converted into cyclical – unemployment due to country level depression. Due to the un-employment people did not earn minimum income to live and survive and at the same time the GDP of the country was depressing as production units were closed due to lockdown that is the major reason of increasing inflation rate in the country. Due to all these facts the overall economy was affected. Furthermore, this study also reveals that which variable affects the economic growth badly and

which variable had insignificant effect on the economic growth. This knowledge is the addition in the field, but further research can also be made in this literature.

Theoretical/Practical Implications

In this study we have estimated the impact of pandemic on the economy of the country and found that many measures were taken against the Covid-19 pandemic that are helpful in controlling the pandemic, but these are at the same time affects the businesses and the economy. This study clearly tells the facts and figures about the economic losses and spreading of pandemic in Pakistan. Thus, by having all these facts and figures we can easily judge that the loss due to pandemic is very big and it is also easy for us to estimate the total loss faced by the nation's economy. All these findings can be used in formulating economic policies for keeping the economy stable after covid-19. The study also suggests that the ministry of the country should be prepared for the future pandemics and disasters so that in future is we are well prepared for bearing any pandemic like this then in that case our economic will not vacillates.

Limitations

Besides theoretical and practical implications the study has some limitations like the sampled data analyzed in this study was not enough to judge the exact economic loss of the country. This study reveals only the impact of pandemic on the economic growth and did not tell much about the economic development. Thus, we cannot predict the economic development of Pakistan during the covid-19 period.

Future Directions

The study tells us about the economic loss during Covid-19 period, but it does not predict the future loss that will be raised due to covid-19. Thus, researchers can perform research on determining the economic loss in upcoming futures years due to Covid-19 pandemic and lockdown measures.

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