

Covid-19 and Macroeconomic Dynamics: An Integration of Pakistan's Economy

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ABSTRACT

This research is an endeavor to understand the influence of the Corona pandemic on Pakistan's economy. This research aims to scrutinize the influence of Covid-19 on trade and poverty levels. Here, the corona pandemic prevailed in Pakistan's economy such as total corona cases, tests and deaths are also examined from February 2020 to June 2020. This research follows both qualitative and quantitative data methodology approaches. Estimates of this research show that covid-19 influences the financial situation of poor masses and because of covid-19 poverty rate doubles. From 27th February there's a significant increase in total corona victims, total deaths, and corona tests performed. Trade statistics also confirmed a statistically significant effect of covid-19 on exports, imports, and balance of trade. Overall findings show that covid-19 significantly influences trade and poverty levels in the case of Pakistan.

Keywords: Corona pandemic, Covid-19, Trade, Poverty, Exports, Imports, Balance of trade, Pakistan.

INTRODUCTION

The covid-19 pandemic has become the biggest trauma of this century. Corona virus is a curse not only at the state level but also at the global level. Because of Covid-19 international trade, transportation, communication, and socio-economic collaboration and activities between countries influence drastically. The novel Covid-19 influences both the developing countries and developed ones. This virus does not discriminate between rich and poor. However, its presence influences the life of the poor drastically (particularly daily wagers) as compared to rich ones. As in the era of quarantine and lockdown (resulted because of Covid-19), it's difficult for the poor to survive particularly, for daily wage seekers.

Many researchers present Covid-19 as a “de-globalization process”. As the emergence of this pandemic corona turns the globalized world into a de-globalized one. The epidemic of corona is a major concern not only for a state but also for the globe. The pandemic of

the corona is one of the utmost significant shocks that occurred globally over time. The impact of the covid-19 shock is much greater than the crisis of 2008-09. The influence of the Covid-19 pandemic covers all spheres of life such as social, economic, political, financial, religious, health, education, and the environment.

As with other developing economies, Covid-19 significantly influences the economic growth of Pakistan. According to Asian development bank 2020 statistics, the economy of Pakistan will lose around 16-61 US\$ million. Because of the Covid-19 outbreak GDP of Pakistan will fall by 2% to 5% and approximately one million individuals lose their jobs. International Money fund (IMF) 2020, projected a contraction of 1.5% in Pakistan's GDP growth.

This study aims to statistically examine the following objectives;

- Analyze the impact of the Corona pandemic on the poverty rate.
- Integrate the impact of covid-19 on the poor financial situation.
- Examine the prevailing state of corona in Pakistan.
- Analyze the impact of covid-19 on exports, imports and balance of trade.

This research has been organized in the following manner. In the first section introduction of the examined phenomenon is documented. In the second section literature review is exhibited. The third section is about empirical methodology, statistical results and discussion are exhibited. While in the last conclusion or final remarks of this research are displayed.

Literature Review

Rani, R. (2020) analyzed the effect of the corona pandemic on the economy of India. This study is mainly concerned about the impact of the corona epidemic on all sorts of businesses (size doesn't matter) in all sectors of the economy. GDP growth of India is estimated to be decreased by 2.5% in the period epidemic of covid-19. Estimates of this study provoked that covid-19 influences all sectors (such as travel, trade, communication, industries, financial sector, stock market, etc.) of India's economy significantly (Raof et al., 2021).

Abeyasinghe, T. (2020) considered the impact of covid-19 on the economy of Sri Lanka. This study highlighted the influence of Corona on 15 major sectors of Sri Lanka economy. The researcher compared the pre-crisis and after crisis empirical estimates. Corona epidemic significantly confirmed direct and indirect effects on growth. McKibbin, et al., (2020); Yifan, S. and Abeyasinghe, T. (2020) also confirmed the strong impact of the Corona epidemic on global business & economic activities.

Koirala, J., & Acharya, S. (2020) documented the corona pandemic's influence on Nepal's economy. Experts confirmed the direct relationship of the covid-19 epidemic with the economic growth of Nepal. As a developing economy, Nepal's economy depends on other economies' trade (mainly on imports and remittances) (Abdulmuhsin et al., 2021). Therefore, the impact of covid-19 will be seen for the next 5 years. Qualitative data estimates demonstrated that the cost incurred by this corona pandemic is much higher

than expected. Khan, N. and Naushad, M. (2020); NY Times (2020) signified the menace created by covid-19 over the globe.

Chohan, U. W. (2020) forecast the economic Impact of Covid-19 on the developing economies. For empirical estimation researchers considered Pakistan's economy. To examine the multi-durational covid-19 impact on Pakistan's economy, the present study uses the aggregate demand approach. Find out that however impact of covid-19 is massive (FY20) but in FY21 through local and global recoveries economic activities will spur again. Hashim, A. (2020); Ahmed, S.H. (2020) documented the influence of the Corona virus on Pakistan's economy.

Bukhari, S. H., & Bukhari, S. M. H. (2020) analyzed the post Covid-19 World & global Political Landscape. The researcher proposed a 'de-globalization' conception. According to them, the Corona pandemic paralyzed the social, economic, financial and political activities in an economy. All these provoke a de-globalization state. Mishra, S. (2020); Monshipouri, M. (2020); Mathew J. Burrows and Peter Engelke. (2020; (Basheer et al., 2021)) also documented the post corona scenario.

Ranasinghe, R., et al., (2020) integrated the post Corona Impact on global poverty. In this research, they argued about tourism based service entities and proposed it as an appraisal for improving the current situation. Vos, R., et al., (2020); Worley, W., (2020) analyzed the role of covid-19 in raising the poverty level. These studies confirmed the strong impact of covid-19 on the poverty level.

Homburg, S. (2020) illustrated the effectiveness or influence of Corona Lockdowns. For empirical examination, the researcher examined several economies that were Austria, the United States, Germany, Italy, Spain, Switzerland, South Korea, and Sweden. The final remark of the study was that Lockdowns were ineffective and superfluous. Furthermore, research suggested that to examine the pandemic of corona dynamics, the researcher may consider the total death rate or delay as compared to total cases.

Gräbner, C., et al., (2020) researched about Corona epidemic pushes polarization. And also illustrated the integration amid the Corona crisis & macro-economic divergence prevailed in Eurozone. Estimates disclosed that the impact of covid-19 on southern Eurozone economies is much strong and more severe than on the Northern Eurozone economies. Structural polarization and macro-economic divergence is the supreme reason for this discrimination. Odendahl, C., Springford, J. (2020); Grabner, C., Heimberger, P., et al., (2020) also documented macro-economic divergence and covid-19 epidemic. These researchers also discovered that there is strong integration between covid-19 and macro-economic divergence.

Chowdhry, S., et al., (2020) exhibited the trade contraction incurred because of covid-19. This study put special consideration on global shipping and trade chains between the EU and China. Estimates provoked that global shipping has significantly declined (around -10%) and there's a severe decline in trade between China with the EU and other economies. Research also argued that the effect of covid-19 on business varies greatly. Thomson Reuters. (2020); Seric, A., (2020) analyzed the global value chain disrupts generated by the corona pandemic.

Marshal, I., et al., (2020). COVID-19 demonstrated the covid-19 impact on Nigeria's economy and also considered the global trade wars resulted because of the corona pandemic. The research followed a descriptive research methodology to conduct this research. The research concluded that the corona pandemic is crippling the economy of Nigeria religiously, socially and economically. Furthermore, the poor were interwoven immediately from the epidemic of the corona. Faduyile, F. (2020); Basheer et al., (2021); Oke, O. (2020) argued about the influence of the Corona epidemic on the Nigerian economy. Javed, M. K., et al., (2020) deliberated the impact of the Corona pandemic on poor masses. The following research uses qualitative data methodology by collecting data through questionnaires. The sample population of this research was from Pakistan, around 544 folks were selected. Results provoked that Lockdowns double the poverty rate.

Rajamoorthy, Y. (2020) determined the Impact of the Covid-19 outbreak on the trade in Malaysia. Researchers disclosed that because of China's global trade contraction there's a significant decline in Malaysia's economic growth. Following research identified the major changes in exports and imports over December 2019-January 2020. Findings showed that electronic & liquefied natural gas exports showed positive growth while petroleum & metal manufacturing showed negative (decreasing) growth.

Empirical Methodology

In this research, researchers use both qualitative and quantitative data methodology approaches. For empirical estimation of poverty, researchers choose the qualitative data methodology approach used by Javed, M. K., et al., (2020). And for the corona epidemic and trade researcher uses quantitative data methodology. For empirical estimation researcher selected Pakistan's economy. This research is descriptive.

a)Data Collection

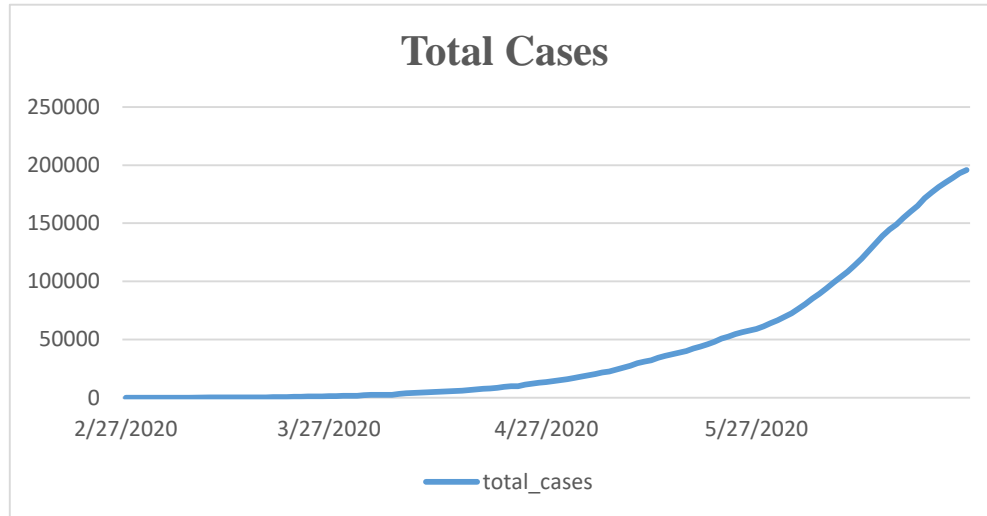
Data for poverty was collected from the study of Javed, M. K., et al., (2020). For poverty data collection a set of five questions send to 544 folks through social media platforms and feedback attained was 200. And the data for the Corona epidemic is collected from the organization of 'our world in data. Data from 27 February to 25 June is collected for selected variables that are total cases and total deaths. While data for trade are collected from the State Bank of Pakistan (SBP). The monthly data set of trade (in service) is collected over February-may.

Statistical Estimation

To statistically estimate the examined phenomenon (covid-19, trade and poverty), this research exhibited several data charts and graphs. Graphs and charts are displayed symmetrically in the followings:

Total Covid-19 Cases in Pakistan

Here, total corona cases that appeared in Pakistan are illustrated with the help of a subsequent chart.

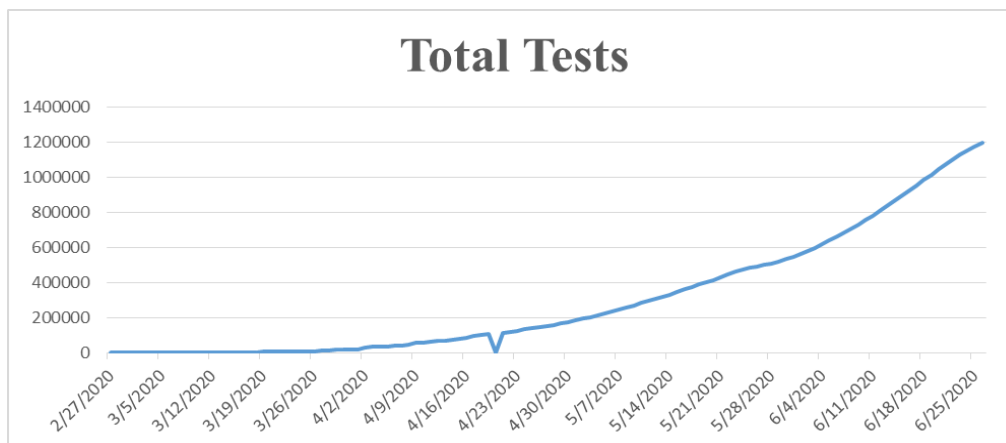


Source: Author on Estimation using Excel

With the help of the above exhibited graph researcher explicated total corona cases that appeared in Pakistan. Data ranges from the 27th of February to the 6th of June of 2020. As the first victim of Corona (in Pakistan) was examined in the last week of February therefore, our data set starts from February (Yan et al., 2020). As the above chart shows, with time number of corona cases tend to increase in Pakistan. There is a significant increase in corona cases from February to June.

Total Covid-19 Tests in Pakistan

Here, total corona tests performed in Pakistan are illustrated with the help of a subsequent chart.



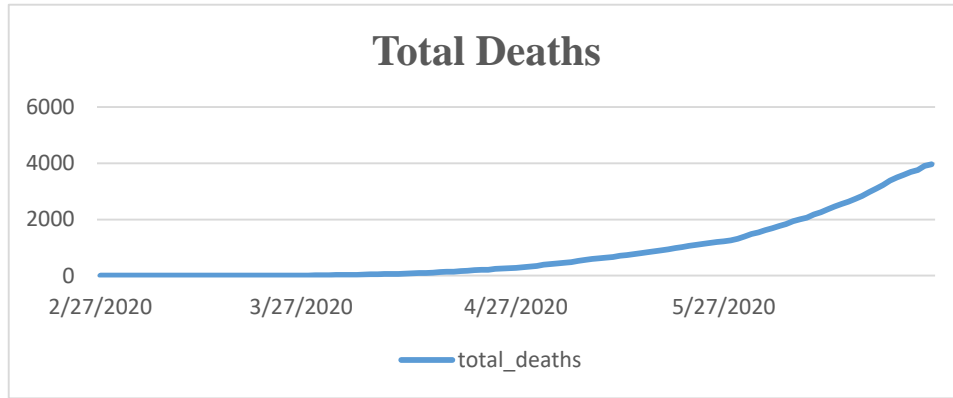
Source: Author on Estimation using Excel

With the help of the above exhibited graph researcher demonstrated the total corona cases performed in Pakistan over time. Data ranges from the 27th of February to the 6th of June of 2020. As the first victim of Corona (in Pakistan) was examined in the last week of February therefore, our data set starts from February. As the above chart shows, with

time, the number of corona tests tends to increase in Pakistan. There is a significant increase in corona tests from February to June.

Total Covid-19 Deaths in Pakistan

In this section, the total deaths that occurred during the covid-19 pandemic in Pakistan’s economy are demonstrated with the help of a subsequent chart.

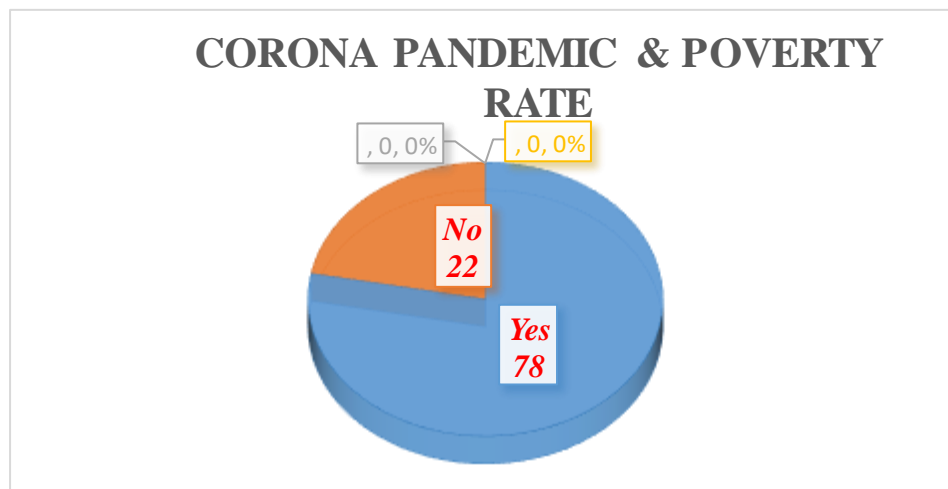


Source: Author on Estimation using Excel

With the help of the above exhibited graph researcher demonstrated the total corona cases performed in Pakistan over time. Data ranges from the 27th of February to the 6th of June of 2020. As the first victim of Corona (in Pakistan) was examined in the last week of February therefore, our data set starts from February. As the above chart shows, with time, the number of corona tests tends to increase in Pakistan. There is a significant increase in corona tests from February to June.

Corona Pandemic & Poverty Rate

In this section, researchers analyzed the role of the corona pandemic in determining the poverty rate. For statistical estimation data through a questionnaire was collected. The question asked here is how many people think that covid-19 double the poverty level. The following chart shows how many people think that covid-19 raised the poverty level.

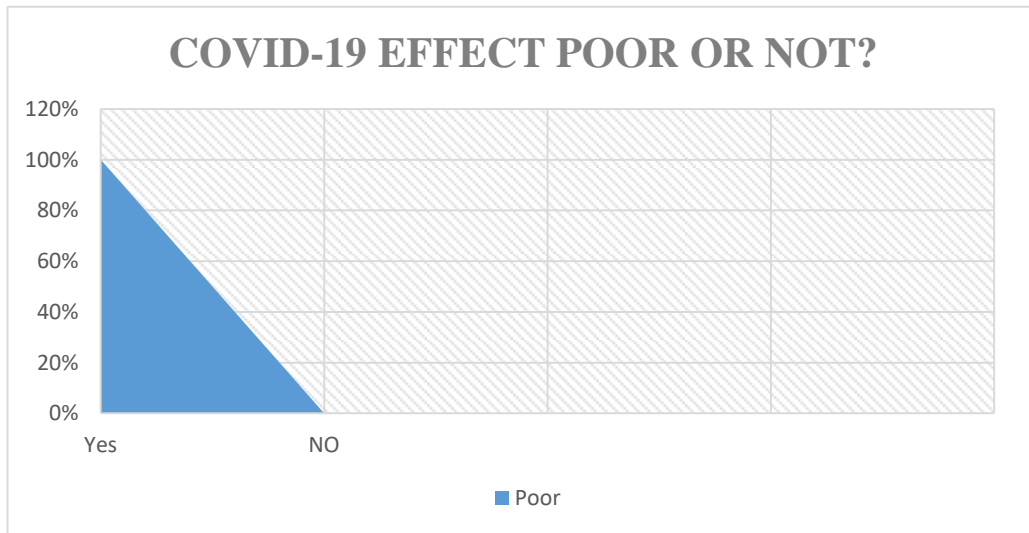


Source: Author on Estimation using Excel

With the help of the above exhibited pie-chart researcher demonstrated how many people think that covid-19 double the poverty level. Out of 544 folks, 200 feedback was collected. And the answers gained showed that around 78% of people think that covid-19 double the poverty level. While 22% think that covid-19 raised the poverty level. In short, there is a significant influence of Covid-19 on the poverty level in the case of Pakistan.

Covid-19 Effect Poor or Not?

In this section, researchers analyzed the influence of covid-19 on the financial situation of the poor. For statistical estimation data through a questionnaire was collected. The question asked here is does Covid-19 influence the poor masses financially in the case of Pakistan? The following chart shows Covid-19 effect poor masses or not.

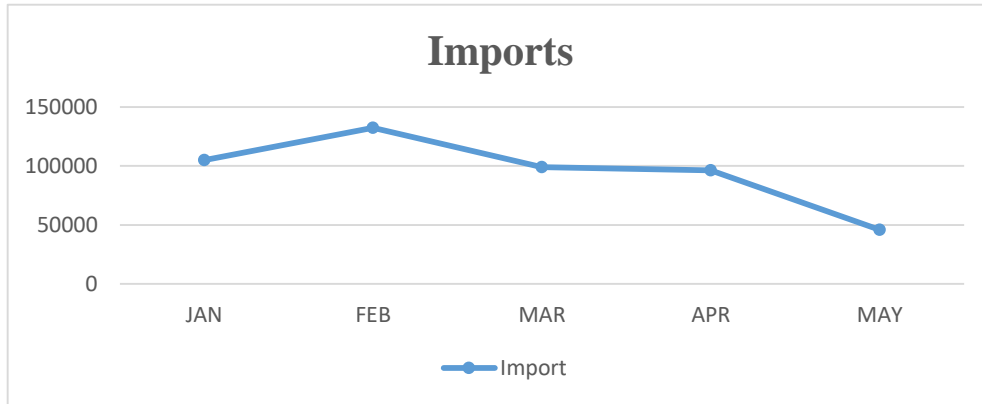


Source: Author on Estimation using Excel

With the help of the above exhibited graph researcher validated the influence of covid-19 on the financial situation of the poor. Out of 544 folks, 200 feedback was collected. And the answers gained showed that 100% of responses gained about the question that covid-19 influences the poor financially. In short, there is a significant influence of Covid-19 on the financial situation of the poor in the case of Pakistan. As lockdown and shutdowns during covid-19 pandemic paralyzed business and work activities of poor masses.

Imports Statistics

In this section, researchers scrutinized the imports statistics in Pakistan from January to May. For statistical estimation data from State Bank has been collected. The following chart shows the imports flow in Pakistan from January to May.



Source: Author on Estimation using Excel

With the help of the above exhibited graph researcher demonstrated the imports statistics in Pakistan over time. Data ranges from January to May of 2020. As the first victim of Corona (in Pakistan) was examined in the last week of February therefore, a decrease in exports occurred from February. As the above chart shows, from January to February imports in service increase but in February imports tends to decline. In March there is a slight increase in imports but in May imports in service tend to decline drastically.

Exports Statistics

In this section, researchers scrutinized the export statistics in Pakistan from January to May. For statistical estimation data from State Bank has been collected. The following chart shows the exports flow in Pakistan from January to May.

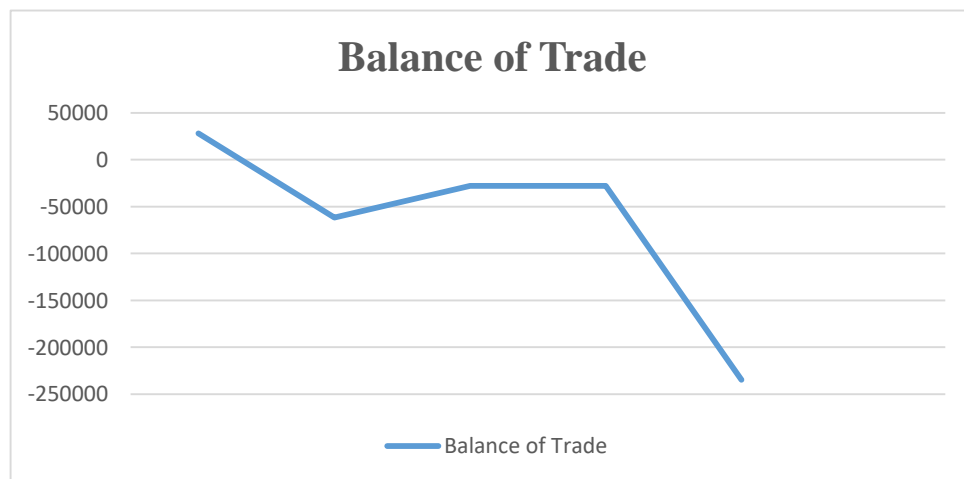


Source: Author on Estimation using Excel

With the help of the above exhibited graph researcher demonstrated the export statistics in Pakistan over time. Data ranges from January to May of 2020. As the first victim of Corona (in Pakistan) was examined in the last week of February therefore, a decrease in exports occurred from February. As the above chart shows, from January to February exports in service decrease but from February exports tends to increase. From March there is a slight decrease in exports but from May exports in service tend to rise significantly.

VIII. Balance of Trade Statistics

In this section, researchers scrutinized the balance of trade statistics in Pakistan from January to May. For statistical estimation data from State Bank has been collected. The following chart shows the balance of trade in Pakistan from January to May.



Source: Author on Estimation using Excel

With the help of the above exhibited graph researcher demonstrated the balance of trade statistics in Pakistan over time. Data ranges from January to May of 2020. As the first victim of Corona (in Pakistan) was examined in the last week of February therefore, the deterioration of the balance of trade started in February (Nuseir et al., 2020). As the above chart shows, from January to February balance of service trade decreased but from February balance of trade tends to rise slowly. From March there is a slight increase in the balance of trade but from May balance of service trade tends to decline significantly.

Conclusion

The covid-19 pandemic has become the biggest trauma of this century. Because of Covid-19 international trade, transportation, communication, political and socio-economic collaboration and activities between countries influence drastically. This research is an attempt to understand the influence of the Corona pandemic on Pakistan's economy. This research scrutinized the effect of the Corona pandemic on trade (exports, imports, and balance of trade) and poverty level. In this research, the corona pandemic

prevailed in Pakistan's economy such as total corona cases, tests and deaths are also examined from February 2020 to June 2020. This research followed both qualitative and quantitative data methodology approaches. Estimates of this research showed that covid-19 influences the financial situation of poor masses and because of covid-19 poverty rate doubles. From 27th February there's a significant increase in total corona victims, total deaths, and corona tests performed (Asada et al., 2020). Trade statistics also confirmed a statistically significant effect of covid-19 on exports, imports, and balance of trade. Overall findings show that covid-19 significantly influences trade and poverty levels in the case of Pakistan.

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