



Impact of Covid-19 on Macroeconomic Factors and Performance of Airline Companies of Pakistan

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ABSTRACT

Purpose: The main objective of current study is to analyze the impact of Covid-19 on macroeconomic factors (i.e. GDP, Inflation rate, Interest rate and Unemployment rate) and performance of airline companies of Pakistan. In current study the researcher analyses that how the pandemic situation affects the macroeconomic variables as well as the performance of the airline industry.

Originality of the Research: This paper is new in terms of the topic because in current time period there is no such study has been found because it takes both the macroeconomic factors as well as the performance of the airline companies of Pakistan, and it also provides the recommendation which is used by the managers and policy makers to overcome the risk.

Design and Methodology: Data has been taken from World Bank website and IMF website because there data are more accurate as compared to other resources. For measuring the performance of the airline companies of Pakistan; the data has been collected from the official websites of the airline companies. For measuring the pre effect of Covid-19 November, December and January months are selected and for post effect of Covid-19 February, March and April months are selected.

Findings: Analysis of the study shows that the financial performance of airlines companies of Pakistan is not so good and they face heavy losses and cash burn which also affects their reputation in the market. PIA has drastically affected due to the Covid-19 pandemic. Result of current study suggests that inflation rate of country lower down in this situation because of world-wide inflation rate decreases. Interest rate of Pakistan decreases in Covid-19 because due to lockdown situation investment of the people or investors decreases. Unemployment rate of Pakistan is 1.5% higher as compared to 2019 unemployment rate. It affects employees of Pakistan badly.

Limitations and Future Directions: Limitations and future directions are important to improve the work of the government as well as it improves the research quality. Limitations and future directions are also given for future researcher.

Practical Implications: The airline performance mostly affected part of the economy because the immediately shutdown position affects the performance of the companies and the passengers try to stay at home. During this current government and covid-19 scenario the unemployment rate is too high which shows that the policies of government are not so good for improving the life style of individual people and they should improve and amend the policies for employees so that the unemployment rate should be lower down.

Keywords: Covid-19, Financial performance, Airline companies of Pakistan, Inflation Rate, GDP, Interest Rate and Unemployment Rate.

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ayeshaseerat07@gmail.com**Cite this article:** Seerat A, Chughtai S. (2021). *Impact of Covid-19 on Macroeconomic Factors and Performance of Airline Companies of Pakistan*. *RADS Journal of Business Management*, 3(1): 1-16.This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.**1. INTRODUCTION**

The COVID-19 pandemic has been attacking the world and its economies since March 2020. In April, the U.S. unemployment rate shot up to 14.7 percent, while individual utilization consumptions were just about 20% lower than at their top in February, with whole areas, for example, diversion and air transportation—coming to a standstill in enormous areas of the country. Forecasting the macroeconomic impacts of the pandemic throughout the following not many years is significant to coordinate the proper arrangement reaction, just as to direct business and family choices, however it is amazingly difficult since this sort of financial shock is exceptional in its sort and scale. This is the errand that we tackle in this paper, zeroing in additional on the solid suspicions that are important to gain some headway on the issue, than on the figures that we produce.

Airline industry maybe the most noticeably awful hit with Coronavirus sway. The preventive prohibitive developments have definitely marked the carriers and partnered administrations with colossal misfortunes. Carriers travelers' administrations in India stay suspended for multi day (25 March 2020 to 24 May 2020), carrying huge misfortune to the business. As indicated by DGCA, six days suspended tasks of March prompts 33% decrease in traveler traffic (from 11.5 million revealed in March 2019 to 7.8 million in March 2020).⁴ according to CRISIL Infrastructure Advisory report, the normal income misfortune to the Indian flight area because of lockdown adds up to 240 billion; bury se, aircrafts represent 70% misfortunes, trailed by unified administrations ground taking care of, and so forth CAPA India assesses the business stunning misfortunes of 240 to 270 billion in April-June quarter, expecting tasks to stay suspended till June 2020.

During the principal half of 2020, the Covid infection (COVID-19) pandemic had expansive ramifications for society. Aside from the conspicuous direct effect on wellbeing and mortality, the actions applied to control the spread of the illness caused significant interruptions in monetary movement that will presumably be trailed by a long recuperation period. Avionics was especially hit, with a half reduction in the all out number of flights worldwide during April and May 2020. A few nations saw their air transport movement decline by more than 90% for a very long time or more (European Commission, 2020).

The worldwide disease or the disease which affects the overall world population called a pandemic and Covid-19 is one of the pandemic situations which affect the health and economy of the countries. This pandemic situation affects the developing countries like Pakistan in there aggregate demand, the slowdown of the economy and to increase in the unemployment rate i.e. to 8.1% with 12.3 million to 18.53 million expected layoffs. This would affect the demand of the economy and decreases the expected remittances. It would also decrease the private consumption expenditure of the people with 4 to 8% it also changes the life style of the people of society.

However, the government of Pakistan since from past years focused on the export-led growth of the country but the Covid-19 situation decreases the ratio of trade and disregarding the investment opportunities which results in a decrease in the gross domestic product of Pakistan.

Due to the Covid-19 situation in Pakistan, the real GDP decreases in the fiscal year 2019-20 around 3% because of the slowdown for services and manufacturing sectors. Pakistan is an agricultural based country and due to

this pandemic situation, this sector also disturbed as transportation, logistical support, and availability of the input for the next planting season. The government has limited the fiscal buffer to actively respond to the pandemic situation of Covid- 19 which creates a macroeconomic crisis for Pakistan.

International financial institutions projected and estimate the macroeconomic impact on the economy of Pakistan, they also analyze and estimate the socio-economic aspect as Pakistani economy. It also helps the government to make policies and take decisions to minimize the challenges of increased population. Socio-economic impact analysis and recommendations are important because of the rapidly changing situation of the country (Ahorsu, D. K.-Y 2020).

Current model of the study has been supported through market power hypothesis. Market power theory said that the organizations which have higher number of pieces of the pie and very much separated items can practice market power. A vital commitment to the design execution contemplates is the productive construction theory proposed by Demsetz (1973, 1974) and Peltzman (1977). The effective construction worldview proposes that market structure is dictated by the productivity of the working firms. In clarifying a benefit structure relationship, market-power (MP) speculations express that market power is the principle variable that makes productivity change.

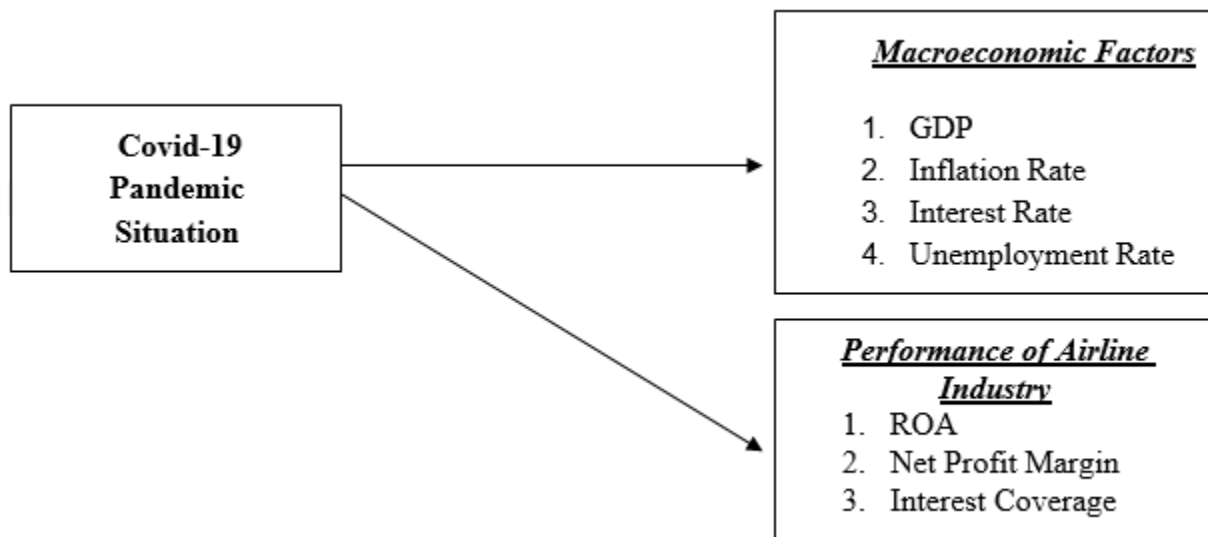
Concentrated business sectors regularly involve market defects that may result from plot, worked with by high fixation, or by (administrative) passage and leave boundaries which are frequently presents in aeronautics industry because of severe guideline. Due to these flaws, firms work in a market that goes astray from amazing rivalry, which empowers them to apply impact on costs charged or paid. These organizations accomplish higher benefits to the detriment of their clients through their value setting.

In current model of study macroeconomic variables are supported through the macroeconomist hypothesis. The typical strategies for utilizing factor investigation way to deal with decide the variables influencing resources returns, a few researchers have estimated macroeconomic elements to clarify firm return and found that adjustments of financing cost are related with hazard premium. They deciphered the perception to be impression of changes in the pace of swelling, given the finding of Fama (1977) that adjustments of the pace of expansion are completely reflected in loan costs (Emenuga, 1994). The macroeconomic methodology endeavors to look at the affectability of firms' costs to changes in macroeconomic factors. The methodology sets that firms' costs are affected by changes in cash supply, loan fee, swelling and other macroeconomic pointers. It utilizes general harmony approach, focusing on the interrelations between areas as vital to comprehension of the diligence and co-development of macroeconomic time series, in view of the monetary rationale, which proposes that everything relies upon all the other things (Muchiri, 2012).

So, the current model has been supported through the market power hypothesis and macroeconomic hypothesis. The current situation of the world and developing countries like Pakistan has an impact on the social, economic, and human lifestyle, and serious consequences occur on the national, international, and regional levels. So, effective and coordinated policies should be used to minimize the effect of this pandemic. The questions which address by current study are; to analyses that how the pandemic affects the macroeconomic factors of Pakistan. How the performance of airlines companies has been affected by the covid-19 pandemic.

Current model has been extracted from the gap given by Agarwal (2020); in his paper he examined that how the government policies change of influences the factors of the airline industry of India. He said that in future the researchers should use different country with different years to analyses the financial performance of the airline companies. Second gap is taken from Abate. et. al., (2020) they examined the government reserves given to airline industry and overcome the losses of airline industry.

In current study covid-19 pandemic and Airlines companies has been taken as independent variables, macroeconomic factors i.e. (inflation rate, interest rate, unemployment rate and GDP) and performance indicator factors i.e. (ROA, net profit margin and interest coverage) taken as dependent variables.



2. LITERATURE REVIEW

Aircraft industry has been one of the quickest developing industry universally as far as interest just as limit (Lee 2019). Over the previous century, business flight has been seen as necessary piece of financial thriving, invigorating exchange, developing the travel industry improvement. Its overall affordability lately has instilled it in individuals' ways of life (O'Connell 2018). Flying areas financial commitment (immediate, aberrant, incited and the travel industry attendant) in Global GDP is assessed as USD 2.7 trillion (Abate, 2016). Notwithstanding the development popular just as limit, the areas has consistently been financially difficult battling with flimsy edges, defenseless against fuel costs, unfamiliar trade, loan fees and high rivalry (Merkert and Swidan 2019; Stamolampros and Korfatis 2019).

The business has been presented to dynamic outer climate, guidelines, innovation, clients inclination, exceptional contest, work cost, fuel costs and safety efforts, etc (Riwo-Abudho *et al.* 2013). Carrier industry execution is unforeseen to large scale consistency, miniature vulnerability and large scale natural components (Mhlanga 2019). Carriers industry has consistently been presented to exogenous occasions. Psychological oppressor assault of 9/11 has placed the business into sorrow making number of carriers bankrupt. The individuals who safeguarded from the effect have been gotten with the oil emergency of 2002 (Yang 2007). The section of minimal expense transporters (LCC) in 2006 set off turnaround changes in the business as far as valuing techniques and well as rivalry level (Belobaba 2011). The LCCs valuing and income the board techniques undermine the business practicality of customary model, convincing the progressions in ordinary aircraft income the executives rehearses (Michaels and Fletcher 2009).

Despite the fact that the aeronautics area is slowly turning into a more serious and market-driven industry, the job of governments in advancing public interests through intercessions in air transport at both public and worldwide levels has not lessened. Flying is seen by most governments as an essential area firmly connected with financial turn of events (Zhang and Graham, 2020), and accordingly is straightforwardly or in a roundabout way upheld across a few pieces of its worth chain. Flying approaches, as other financial arrangements, mirror a harmony between the interests of customers and the flight and the travel industry

ventures. Backing can be as specific sponsorships to administrators, makers, or specialist organizations (Gossling *et al.*, 2017), or of intercessions that confine market admittance to expected contenders (Christidis, 2016) and make monopolistic bottlenecks (Knieps, 2014). Public and provincial air transport improvement strategies are frequently based on guaranteeing homegrown and worldwide flying network, since the number and recurrence of aeronautics associations are firmly connected with financial development (Njoya *et al.*, 2018).

On 2 January 2020, PM Imran Khan stated that the organization had offset the economy, announcing this to be the hour of advancement, improvement, and wealth creation. A week later, the cash administration gave a public proclamation proclaiming that the economy was moving legitimately along the change way and alteration measure and money related recovery is ordinary towards the completion of FY2020.

Worldwide banks and assessment associations have grasped Pakistan's organization of the economy. In December 2019, Moody's updated Pakistan's credit point of view from negative to stable, and Citibank's top organization in Pakistan praised the Khan government's budgetary methodologies. As late as the latest multi-day stretch of February 2020, Credit Suisse conveyed a report named "Pakistan: On the Path to Recovery," seeing that the "rudiments" of the economy had improved on a very basic level on account of the IMF group, financial blend and the fundamental changes being endeavored by the lawmaking body.

Singular evaluation of the dangers of death relies upon the likelihood of death, long stretches of life lost, and the abstract limiting element. Viscusi *et al.* (1997) position pneumonia and flu as the third driving reason for the likelihood of death. Sunstein (1997) examines the proof that a person's eagerness to pay to keep away from death increments for causes apparent as terrible passing particularly feared, wild, automatic related with high externalities, and delivering distributional disparity. In light of this study, it isn't outlandish to accept that singular view of the dangers related with the new flu pandemic infection like Spanish flu in its harmfulness and the seriousness of clinical side effects can be exceptionally high, particularly during the beginning phase of the pandemic when no antibody is accessible and anti-viral are hard to come by., Pakistan's economy was wavering on basically every monetary boundary.

In any case, by January 2020, the rate had spiked to 14.6 percent, with food development at 19.5 percent in metropolitan districts and 24 percent in nation zones. In March 2020, the growing number tumbled to 10.2 percent, with food extension at 13 percent and 15.5 percent (metropolitan and commonplace, individually), yet this was generally a result of the unsettling influence and withdrawal achieved by the pandemic.

As a component of the IMF understanding and to control swelling, the SBP had been consistently rising financing costs. From 6.5 percent when the Pakistan Muslim League-Nawaz (PMLN) government demitted office in May 2018, the SBP's benchmark loan cost expanded to 13.25 percent in July 2019. The high loan fee was additionally intended to pull in 'hot cash' into Pakistan. Around US\$ 3 billion streamed into Pakistan as the acquisition of momentary depository bonds, yet it began to stream back when the COVID-19 emergency began to unfurl in the West.

At last, high taxation, high loan costs, and the degrading of the Pakistani Rupee (which raised the costs of imported sources of info) lead to a gigantic fall in mechanical production. According to Dr. Hafiz Pasha, "A considerable lot of the ventures have enlisted twofold digit decreases in the initial four months of 2019-20. The creation is somewhere near 43 percent of vehicles; 19 percent of bikes; oil-based commodities by 14 percent; cigarettes by 36 percent; steel items by 30%; synthetics by 20%, etc. Actually, out of the 112 product offerings secured by the QIM, there has been a decrease in yield in 65 lines.

Indeed, even as the business was confronting an extraordinary emergency, it was accounted for that the cotton yield would be 20% lower than in the past year. Since materials (generally cotton) establish almost 60% of Pakistan's fares, this droop in cotton yield would represent extra unfamiliar trade trouble, since Pakistan's reliance on cotton imports would increment to keep the material business running.

The destitution and joblessness measures by the PIDE are impressively more basic than those of Pasha and Kardar. In a movement of declarations dispersed on the possible impact of COVID-19, the PIDE presented four possibilities. The direst results conceivable are a high impact and include GDP advancement. PIDE checks that the desperation rate will increase from around 23.4 percent to just about 59 percent bringing the outright people living underneath the poverty line to 125 million individuals. Be that as it may, thinking about the moving toward slump and likely opposite GDP improvement, this circumstance could be a moderate gauge.

The PIDE has evaluated that 56 percent of the workforce falls under powerless work. This fuses 80% of the people used in agribusiness, 75 percent in markdown and retail trade, half in lodgings and diners, 60% inland and business, and 40% in transport and correspondence segments. The World Bank envisions that the brunt of the plunge ought to be borne by the easygoing zone and consistently wage workers used in the regular section. As indicated by a PIDE study, in the event of an all-out conclusion, around 18.5 million people who were significant for powerless business would be laid off. This circumstance is at present unlikely, given the loosening up in lockdown. In any case, even with moderate impediments, beyond what 12 million people could lose their positions.

Inside the feeble business, the principle some portion of the reductions would incorporate step by step wage workers and the people who manage a piece-rate premise. Formal-fragment workers are moreover in harm's way. According to one report, one of Pakistan's greatest hotel networks has recently laid off 20% of its workforce. There is a creating feeling of shakiness about work in the country.

Punjab, the most packed territory in Pakistan, will bear the majority of occupation disasters. PIDE measures that almost people in Punjab could get laid off. Diverged from various regions, Sindh has a negligible number of weakly used, anyway, the assessments are upsetting notwithstanding, with three to 4,000,000 people at risk for work incident. For the other two regions, PIDE information recommends that 2,000,000 in KPK and 1,000,000 in other provinces are probably going jobless.

3. METHODOLOGY

Methodology section of current paper shows that how the data of current variables used in the paper has been collected. Data of Covid-19 cases has been collected from the World Health Organization website. Macroeconomic factors i.e. Inflation, GDP, Interest rate and Unemployment rate has been collected from International Monetary Fund Website. Information about airlines total expenditure, cash burn, ROA, net profit margin and interest coverage has been collected from the official websites of the companies. Financial reports have been provided in their official websites from there the data about the financial ratios has been collected.

Following table shows that how the final amount has been extracted from the given amounts in the financial reports. Name of the variables and their formulae are mentioned below which shows that how the variable data has been measured.

Table 1. Formulae of Variables used in the study

Sr. No	Name of the Variables	Formulae
1	Inflation Rate	Mentioned in World Bank and IMF websites
2	Interest Rate	Mentioned in World Bank and IMF websites
3	Unemployment Rate	Mentioned in World Bank and IMF websites
4	Gross Domestic Product	Mentioned in World Bank and IMF websites
5	Return on Assets	Net income/ Total Assets
6	Net Profit Margin	(Revenue-Cost)/ Revenue
7	Interest Coverage	EBITDA/ Interest Expense

Econometric Equations

The following econometric equations has been used for the analysis of current study;

$$Covid - 19_{i,t} = \beta_0 + \beta_1 INF_{i,t} + \beta_2 INT_{i,t} + \beta_3 GDP_{i,t} + \beta_4 Unemployment_{i,t} + \epsilon_{i,t} \quad (1)$$

Equation 1 shows that Covid-19 is the number of covid-19 cases in Pakistan, β_0 is the constant in the equation INF is the inflation rate, INT is the interest rate, GDP is the gross domestic product of Pakistan, Unemployment is the rate of unemployed people within the country during particular time period; $\epsilon_{i,t}$ is the error term.

$$Covid - 19_{i,t} = \beta_0 + \beta_1 ROA_{i,t} + \beta_2 NPM_{i,t} + \beta_3 Int Cov_{i,t} + \epsilon_{i,t} \quad (2)$$

Equation 2 shows the relationship of airlines companies' performance and the covid-19 cases. β_0 is the constant of the study, ROA stands for return on assets, NPM stands for net profit margin and Int Cov stands for interest coverage; $\epsilon_{i,t}$ is the error term.

4. ANALYSIS

Table 2 shows the comparison of 2020 and 2019 total expenditures and cash burn of the airline companies of Pakistan. An airline company has been affected through the covid-19 cases in Pakistan because the complete lockdown situation totally disturbs the whole system of the economy badly. Column 1 shows the year, column 2 show the names of the companies, column 3 shows the total expenditures of the companies and column 4 shows the cash burn amount of the companies which they sacrifices due to the pandemic situation in Pakistan.

Table 2. Total expenditures and Cash burn of Airlines companies

Year	Name of the companies	Total expenditure	Cash Burn
2020	Pakistan International Airlines	Rs 72 Billion	\$ 33 Million
	Saudi Airlines	Rs. 83 Billion	\$ 77 Billion
	Qatar Airways	Rs 51 Billion	\$ 75 Billion
	Air blue	Rs 43 Billion	\$ 10 Billion
	Emirates	Rs 58 Billion	\$ 10 Million
2019	Pakistan International Airlines	Rs. 65 Billion	\$ 43 Million
	Saudi Airlines	Rs. 1020 Billion	\$ 98 Billion
	Qatar Airways	Rs 65 Billion	\$ 95 Billion
	Air blue	Rs. 54 Billion	\$ 18 Billion
	Emirates	Rs. 62 Billion	\$ 19.8 Million

Pakistan international airlines should be considered the most affected airline company of Pakistan. Total expenditures of the company in 2020 are \$ 72 billion but in 2019 it was registered as \$65 billion. Cash burn rate of PIA in 2020 was \$33 million but it was \$43 million in 2019. The main reason behind the more cash burn rate in 2019 was that the immediately shutdown position disturb the whole system of the country.

Saudi Airlines is the second most popular airline company of Pakistan. Total expenditure of Saudi airline \$83 billion but it was \$1020 billion in 2019. Cash burn amount of Saudi airline in 2020 was \$77 million and in 2019 it was \$98 billion. For Qatar airways, Air blue and Emirates the total expenditures and cash burn are more in 2019 as compared to 2020.

Table 3 shows the relationship of covid-19 on the financial performance of Airline companies of Pakistan. Below table shows the performance of two years. Column 1 shows the name of the companies, column 2 shows the number of year, column 3 shows the ROA value, and column 4 shows the net profit margin of the companies and last column shows the interest coverage of the companies.

Table 3. Impact of Covid-19 on Performance of Airline companies

Company Name	Year	ROA	Net profit margin	Interest coverage
Pakistan International Airlines	2020	-19.93%	-34%	-0.25%
Saudi Airlines		13.91%	36.12%	7.92%
Qatar Airways		-11.17%	-32.54%	-3.45%
Air blue		-10.33%	-31.54%	-2.44%
Emirates		-9.45%	-6.76%	-0.22%
Pakistan International Airlines	2019	-24.57%	-36.47%	-0.19%
Saudi Airlines		-14.51%	-35.61%	-8.91%
Qatar Airways		-16.43%	-35.64%	-5.45%
Air blue		13.45%	34.54%	5.67%
Emirates		-10.56%	-8.94%	-2.34%

Table 4 shows the relationship between the covid-19 and macroeconomic variables of Pakistan. In column 1 name of the variables are written, in column 2 coefficient values and in column 3 p-values are written. Below table shows that inflation rate and the covid-19 cases are positively and significantly related with each other. The main reason of positive relationship is when the lockdown situation within the country arise it automatically shut down all the businesses within the country and the inflation rate increases. That's why inflation rate and covid-19 cases positively related with each other. Interest rate is an important factor for the investors but due to the covid situation and shut down businesses in the country the interest rate decreases. GDP is the overall amount of money which comes within the country during some specific time period. Due to Covid-19 situation borders of all linked countries are closed which affects the import and export of the country; it ultimately affects the GDP of Pakistan. Unemployment rate is increase due to the virus because firms are closed and there is no other source of income for people.

Table 4. Impact of Covid-19 on Macroeconomic variables of Pakistan

Name of variables	Coefficient	P-value
Inflation rate	0.8434	0.004***
Interest rate	-5.0132	0.000***
GDP	-9.0170	0.001***
Unemployment rate	-2.3544	0.000***
R-Square	0.5933	

Table 5 shows the relationship between covid-19 and the performance of airline companies of Pakistan. Column 1 show the name of the variables, column 2 show the coefficient value and column 3 show the p-value of the variables used in the study. The current result shows that the airline companies of Pakistan are in losses due to the complete lockdown condition in the country. It fully disturbs the whole economy. Result show that ROA is significantly and negatively related with the covid-19 cases of Pakistan. Net profit margin is the profit of the company which they earn during the particular time period. Result of the study shows that covid-19 cases negatively related with the net profit margin of the airline companies. The main reason is that the passengers try to avoid traveling from one city to another due to the pandemic situation. Interest coverage is the ratio which shows that how easily the companies pay off the interest on the outstanding debts of the company. Due to this pandemic situation the airline companies are not enough revenues so they have not enough amount of the revenue to repay the interest amount on the debts which are outstanding.

Table 5. Impact of Covid-19 on performance of Airline companies of Pakistan

Name of variables	Coefficient	P-value
ROA	-0.99944	0.003***
Net profit margin	-2.88087	0.000***
Interest coverage	-0.06343	0.000***
R-Square	0.5746	

The following table shows the result of macroeconomic variables before the COVID-19 pandemic. For analysis of the pre and post effect of COVID-19 on macroeconomic variables, we have taken GDP, inflation rate, government loans, and money supply before the COVID-19 crisis. The analysis shows that in November, December 2019, and January 2020 there is no single cause of COVID-19 in Pakistan.

Table 6 shows the result of macroeconomic variables conditions before the pandemic situation of Covid-19. The researcher collects data of November, December, and January because in these months there is no single case of Covid-19 in Pakistan. As for the concern of the current study GDP of Pakistan is collected on an annual basis. So the GDP value in three months remains the same. The inflation rate of Pakistan in November 2019 is 12.7% it means that in this month the prices of goods and services increased 12.7% from their original price. In December 2019 the inflation rate of Pakistan is 12.6% it's also high but as compared with the previous month it is a 0.1% decrease in the inflation rate. In January 2020 the inflation rate of Pakistan is 14.6% which is almost 2% higher than the previous months the main reason for this high inflation rate is the government debts taken from the IMF and the high amount of interest rate which was imposed by IMF into Pakistan.

The interest rate before the pandemic situation is 10.35%, 10.43%, and 10.47%. The result of the study shows that there is little bit increase in the interest rate of Pakistan. The unemployment rate is taken every year that's why the value of unemployment is the same in three months i.e. 4.45%. It means that the unemployment rate

in Pakistan is 4.45% which is higher than the unemployment rate of 2018 which is 4.08%. It shows that the employees of Pakistan don't receive full benefits from the job due to such circumstances and there are no perfect employment opportunities.

Table 6. Macroeconomic situation of Pakistan before Covid-19

Before Covid-19			
	November, 2019	December, 2019	January, 2020
NO. of cases	0	0	0
GDP	1.91%	1.91%	1.91%
Inf. Rate	12.7%	12.6%	14.6%
Int. rate	10.35%	10.43%	10.47%
Unemployment rate	4.45%	4.45%	4.45%

NOTES: No. of cases shows the actual number of cases of Covid-19 in Pakistan. This table shows analysis before Covid-19 that's why no. of cases shows 0 values. GDP stands for Gross domestic product of Pakistan. Inf. Rate shows inflation rate of Pakistan. Int. Rate shows interest rate of Pakistan. Unemployment rate shows percentage of unemployment before pandemic situation.

Table 7 shows the result of macroeconomic factor situation after Covid-19 pandemic. The first case of Covid-19 is registered in Pakistan on 26, February 2020. In the month of February total 4 cases are registered according to the world health organization. In March total 1717 cases are registered in Pakistan and in April the cases are 16,473. Total numbers of Covid-19 cases in individual provinces are shown in graph in appendix. The GDP of Pakistan is taken on annual basis which is 1.71% but in May, 2020 IMF predicts that the GDP of Pakistan lowest of 2.9% which is very low in all countries of South Asia.

The covid-19 situation affected both the foreign and domestic investment of the country. This pandemic situation decreases the real GDP of the country by decreasing the growth in services and manufacturing sectors. Agricultural sector of country disturbed due to the unviability of transportation, logistical support and have no access of input for the planting. It is difficult for the government to meet the fiscal deficit because the revenue collection is very low or below the target level due to the pandemic situation.

After pandemic situation of Virus, the inflation rate of Pakistan is lower as compared to before this pandemic situation. The reason of lowest inflation rate is the global level effect and overall market of the world have lowest inflation rate due to the situation. Result shows that in February, 2020 the inflation rate is 12.4%, in March, 2020 the inflation rate is 10.2% and in April, 2020 the inflation rate is 8.5%.

Interest rate of Pakistan after the situation is 10.6% in February, 2020 but in March, 2020 it becomes 7.88% which is 2.72% lowest as compared to previous month. But in April, 2020 the interest rate is 9.12%. The main reason of decrease in interest rate is the increase in number of

Table 7. Macroeconomic situation of Pakistan after Covid-19

After Covid-19			
	February, 2020	March, 2020	April, 2020
Number of cases	4	1717	16,473
GDP	1.71%	1.71%	1.71%
Inf. Rate	12.4	10.2	8.5
Int. rate	10.6%	7.88%	9.12%
Unemployment rate	6%	6%	6%

NOTES: No. of cases shows the actual number of cases of Covid-19 in Pakistan. GDP stands for Gross domestic product of Pakistan. Inf. Rate shows inflation rate of Pakistan. Int. Rate shows interest rate of Pakistan. Unemployment rate shows percentage of unemployment before pandemic situation.

cases and due to this the total lockdown applied in whole country which fully disturbs all the business cycles operation and daily operations are also affected.

Unemployment rate in 2020 is very high as compared to 2018 and 2019 i.e. 4.08%, 4.45% and now 6%. Covid-19 very heavily affected the overall economy of Pakistan. The employees of Pakistan never find a single work due to the lockdown situation because all of work is done on online basis but the people who are daily wage employees highly suffer due to this condition.

5. DISCUSSION AND CONCLUSION

The spiraling and inescapable COVID-19 pandemic has misshaped the world's flourishing economy in erratic and questionable terms. However, it essentially showed that the current slump appears to be principally unique in relation to downturns of the past which had shocked the country's monetary request. While the countries, combinations, organizations and multinationals keep on understanding the extent of the pandemic, it is without a doubt the need of great importance to get ready for a future that is feasible, basically more reasonable for living and working. While the phenomenal circumstance has made an incredible harm the economy, particularly during times of lockdown, the country should deal with it, by presentation of monetary measures. As the public government imagines, insurance of the two lives and work is required. The financial movement should start bit by bit subsequent to screening of the workforce. Severe preventive measures ought to be carried out by the business to defend the soundness of the specialists. While strategy and changes ought to be given out by the public authority satisfactorily to rescue the economy, the business, common social orders and networks have an equivalent job in keeping up with the harmony. The standards of social removing, keeping away from or dropping get-togethers, and utilization of covers and sanitisers ought to be the lifestyle till we can annihilate the infection. During this time, the economy is compared with social conduct of mankind, so the obligation of bringing back monetary activity isn't of government alone.

The PIA's absolute obligation was accounted for to be 400 billion Pakistani rupees as of June 30, 2019. That number is moving toward the 500 billion imprints, with the carrier at present detailing misfortunes of 6.3 billion rupees each month. In spite of figuring out how to decrease functional misfortunes lately, the PIA's longstanding imperfections have reemerged in the midst of the COVID-19 pandemic, which has hit the worldwide aircraft industry.

Flying specialists underline that the PIA's whole working has been held prisoner to vested gatherings, keener on utilizing the carrier to serve individual, or institutional, desires. For some, the PIA is a microcosm of all

that afflicts Pakistan. Thus, similarly as Pakistan's public carrier was gathering billions in misfortunes, its staff tally was expanding, making PIA the world's second most exceedingly terrible as far as representative to-airplane proportion behind Syrian Air in 2016. Today, there are more than 14,000 PIA representatives for an armada of 30 airplanes.

Specialists underline that given the aggregate part of public establishments in demolishing the PIA, it's anything but a likewise joined endeavor to rescue Pakistan's public transporter. As discussion stews over the changes required for the PIA, or if the aircraft ought to be totally privatized, there still remain question marks over the desire of the partners to take the required choices.

Tariq Ali accepts that the COVID-19 pandemic, regardless of unleashing ruin with the flying business, may really push the state to at long last figure out the PIA. He keeps up with that if the redo isn't embraced, the upgraded examination the world over could really boycott the Pakistani flying industry, and not simply the PIA. Assents could be forced, after which no carriers would work [in Pakistan]. Worldwide each mishap is trailed by a straightforward report, which has never occurred with the PIA. [Additionally] while avionics and innovation has advanced [around the world], we're actually stuck before. We have blemishes at our essential acceptance level. There is a principal blemish in the ability that is enlisted.

This pandemic situation gave Pakistan very serious economic challenges. Even before the pandemic situation Pakistan's economy was in not so good situation. In the Khan's government manufacturing of firm's declined, budget deficit increases, unemployment rate increases and export have decreases. Former finance minister estimated economic growth in Khan's government lower at 1.9% the lowest in decade. Remittances of Pakistan which is the vital source of revenue decrease. The government estimates that GDP decreases 0.38% in 2019-20. The World Bank has forecast even sharper drops of 2.6 per cent for 2019-2020 and 0.2 per cent for 2020-2021. Situation of GDP is shown in Figure 1 in appendix. And situation of unemployment is shown in Figure 2 of appendix.

The current government announced the incentive programs for the employees in current shutdown condition during the pandemic situation. However, during the April and May lots of employees are fired from their respective jobs in Pakistan. In this pandemic situation, government of Pakistan announced Ehsas Emergency Cash Program to provide the financial assistance Rs 12,000 to each family. The GDP decreases around 3% in financial year 2019-20 due to the lockdown situation of manufacturing and services sector.

There are following solutions for unemployment problem;

- Accessing the labor forces which are not captured in LFS.
- Discuss the alleviation packages with the social partners to have the effective feedback.
- Monitor and analyses that measure reach to each employee.

This study analyses the effect of Covid-19 on macroeconomic variables and the performance of airline companies of Pakistan and how these factors are affected due to this situation. Data has been taken on monthly basis so that comparison should be easily done. For before the Covid-19 data has been taken for the month of November, 2019; December, 2019 and January, 2020. For after Covid-19 data has been collected for the month of February, 2020; March, 2020 and April, 2020. For analysis of performance data has been collected from the official websites of the airline companies. Result of the study suggests that PIA is the widely affected company of the Pakistan due to covid-19 but it also affected due to the management flaws and corruption. Result of current study suggest that the economy of Pakistan is affected heavily due to this Pandemic situation because country like Pakistan we have not enough resources like China because we are not so developed country and we also don't have so much Rubout technology like China because China use this technology to deliver food to each house of the country. The policy makers should implement those strategies which decreases the ratio

of unemployment. The economic fallout due to the pandemic situation affects the economy of Pakistan very badly. This at the end effects the political, economic, foreign affair situation and also the strategic relations with different countries. To overcome these problems the government should takes the economic, political and some other steps to control the situation.

Limitations are not bad they suggest the future readers to take future gaps from the limitations of the study. Current study has following limitations. First limitation of current study is time period. The time period of current study is very limited i.e. three months for before Covid-19 and three months for after covid-19. So, in future the researchers should take more months so that the results are more generalized. Second limitation of current study is the geographic factor. Current study collected data only for Pakistani macroeconomic factors the result suggest that future researcher should take more countries and then compare the situation of different countries so that it should be clear that how much different countries' economy are affected due to Covid-19. Thirdly the researcher takes only five airline companies for comparison of two years i.e. 2019 and 2020. In future the researchers should take more airline companies as well as more number of years to analyses that how the pandemic situation affects the financial performance of the airline companies.

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Appendix

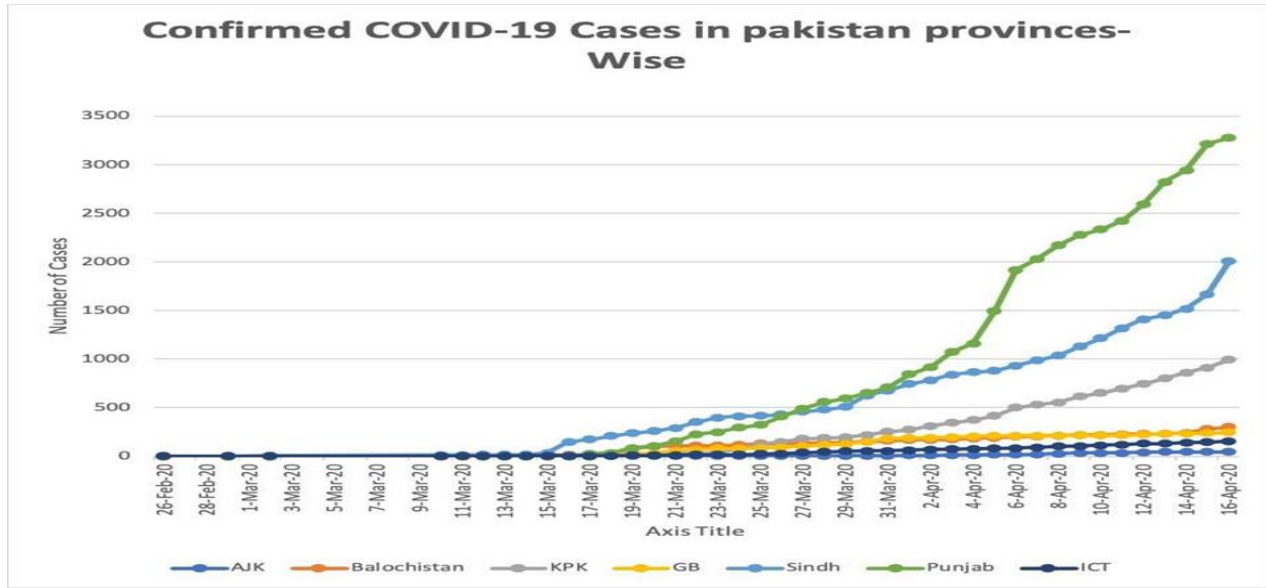


Figure 1. Source of Pakistan’s Covid-19 cases; <https://www.who.int/countries/pak/>

Figure: 2

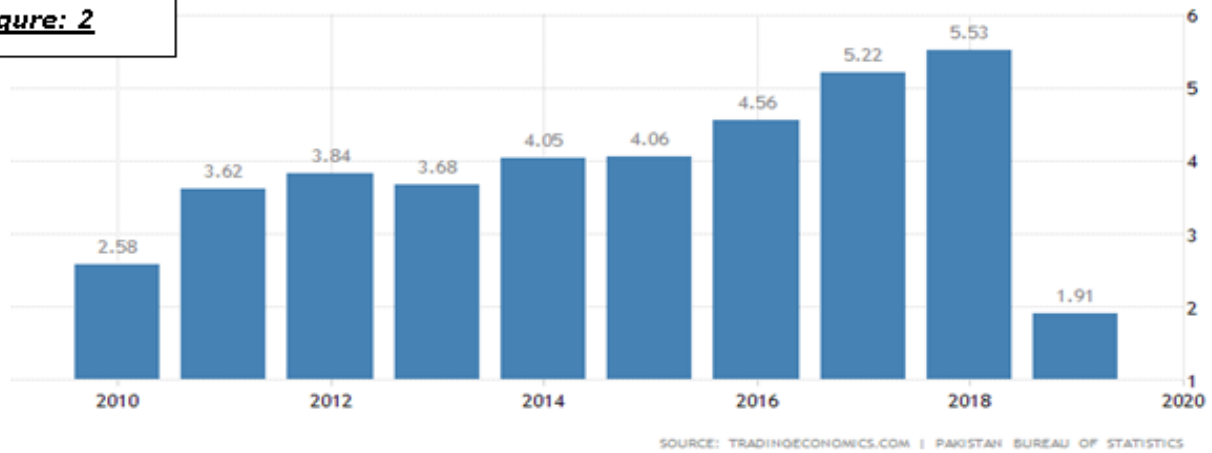


Figure 2. Source: Pakistan Bureau of Statistics GDP before and after Covid-19

Figure: 3



Figure 3. Source: Pakistan Bureau of statistics Unemployment Before and After Covid-19

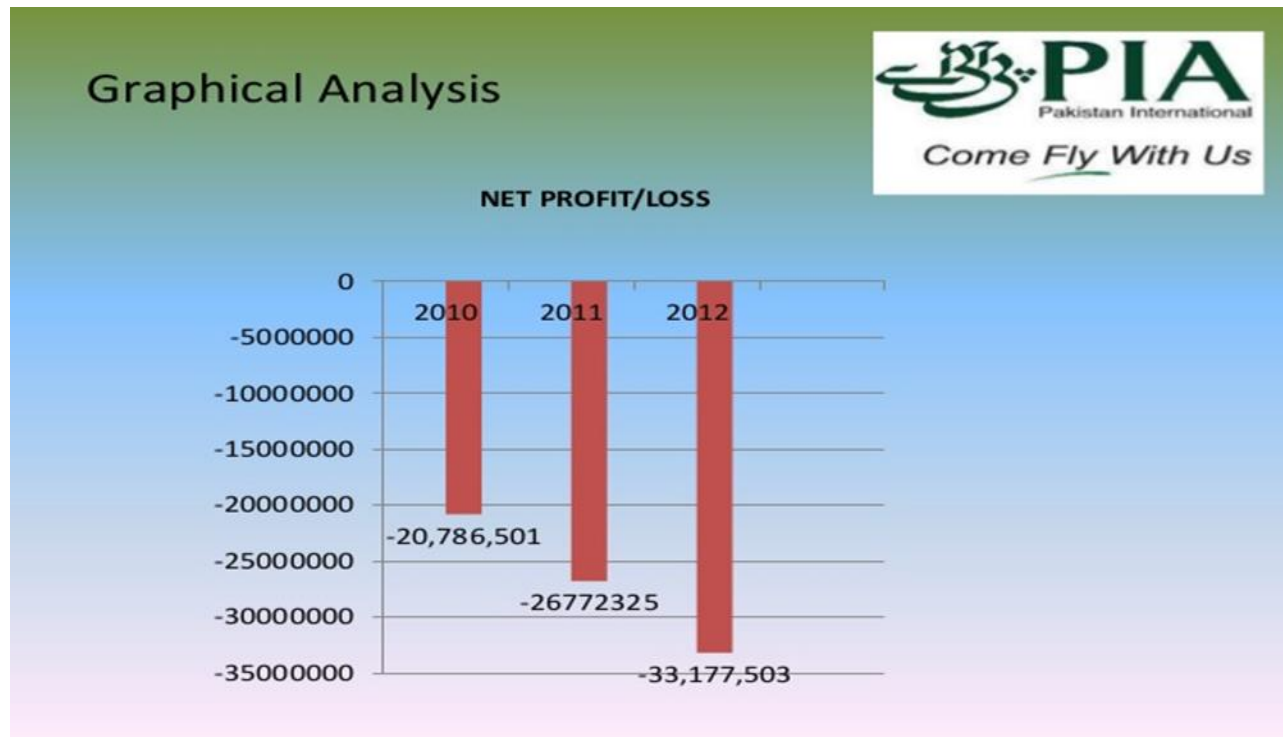


Figure 4.

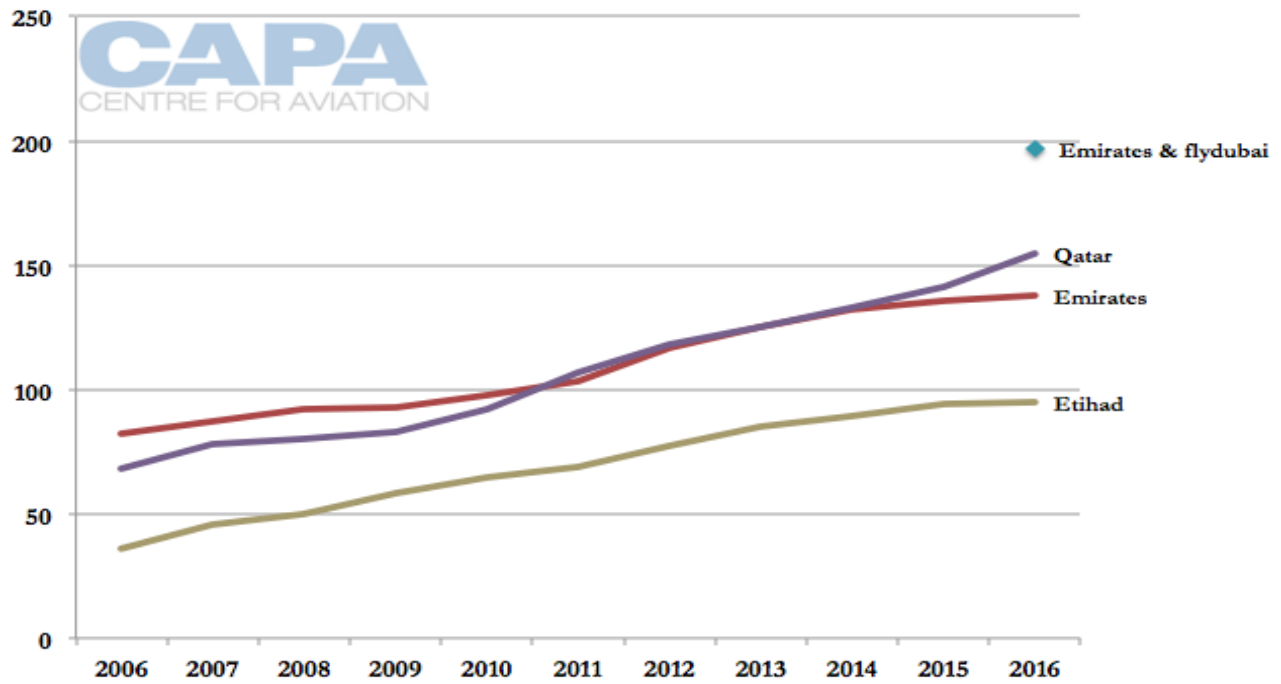


Figure 5.