IMPACT OF COVID-19 ON BUSINESS SECTOR IN DISTRICT PESHAWAR

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ABSTRACT
Covid-19 is considered one of the major natural disasters ever in history that adversely affect the social, political, and economic activities throughout the world. Covid-19 also affects the welfare and well-being of the people by suffering the income earning activities that are directly or indirectly related to the business sector. Therefore, this study investigated the impact of Covid-19 on the business sector in three main markets namely; Saddar Market, Khyber Bazar Market, and Karkhano market in District Peshawar. The collected data was firstly analysed for reliability through Cronbach's alpha test and then the normality test is applied. After analysing and finding the data reliability and normality, the correlation test is applied and the findings show the robust inverse relation between the Covid-19 pandemic and the business sector in the studied markets. Moreover, there is also a strong correlation exists between employment and the business sector. Further, the Ordinary Least Square regression technique findings indicate the inverse and significant effect of Covid-19 on the Business sector. The study also found an imperative effect of employment on the business sector and adversely affecting employment during Covid-19 definitely effect income and business activities not only in studied area but in overall markets.
Keywords: Business Sector, Covid-19 pandemic, Employment, District Peshawar.

INTRODUCTION
Corona Virus Pandemic (Covid-19) is spread almost in the globe, there is no exception. It is believed that Covid-19 takes birth in china in the city Wuhan Hubei province, China in December 2019, while expanding from Chinese New Year and international travels around the globe. Coronavirus emanates from bats and then transfer to a human being. The coronavirus disease is spread through aspiration and also contact or touching with affected people. Covid-19 spread in children, elders, and old peoples. Mostly old ages, patients, and less immune system peoples are severely affected. Usually, fever, cough, sore throat, breathlessness, fatigue are their symptoms (Singhal, 2019). The range of fatality is between 2 to 3%. Coronavirus disease 2019 (COVID-19) is the weightier disease due to which the whole world's social life and economic system are highly affected.

This virus is exceedingly unpredictable and primarily affects persons who are considered high risk due to pre-existing medical disorders like diabetes or cancer, as well as those who are 60 years or older. There are still many unknowns surrounding COVID-19, and because the virus is so contagious, medical personnel worldwide are already overburdened by the overwhelming demand for care. In these unsettling times, when there are worries that a new recession will occur and the economy would crash financially and socially, actions must be taken in the infrastructure sector, economic sector and health sector (Jallow et al., 2021). The ties between regional and global economies were emphasized in previously unheard-of ways as the Covid-19 pandemic expanded throughout the world. Shutdowns and shelter-in-place orders were required due to public health concerns, which led to the greatest

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unemployment rates in developed economies since the Great Depression. Additionally, because to concerns about infection, people are spending patterns underwent a significant evaluation and shifted away from social sectors like leisure and travel. These complex effects cut across various economic sectors, which made it particularly difficult to describe overall behavior (Barlow & Vodenska, 2021).

As the world economy is mostly dependent on small and medium economic activities (business sector) and it is also the main key factor of providing employment, income-generating and reducing poverty. In the Covid-19 pandemic, the business sector faced great loss due to lockdowns and other necessary Standard Operating Procedures (SOP's) actions. In that period, people spend savings for their survival which they made in their past. Due to financial crisis, small businesses are ruined and even they declare bankruptcy, they will not maintain their business. Some businesses are closed for a short period and some of them are permanently closed due to heavy financial losses. Due to facing a financial crunch and closing small businesses, most of the employers are fired from their works that leading to an increase in unemployment and poverty in that period (Kalogiannidis, 2020).

The Covid-19 pandemic has adversely influenced the economic system and social well-being. Moreover, it also negatively affects investors, businessmen, and industrialists as it harms the insurance market (Wanga et al., 2020). The coronavirus could have three effects on the global economy: production disruption, the financial impact on firms and markets, and supply chain and market disruption. The services sector is affected due to Covid-19 as businesses are closed and millions of workers are facing unemployment (Javed, 2020). When the government imposed lockdown and the consumer, workers and producers have been locked in their lodges, the businesses are switched off. The consumer changed their business model to digital business which is too much expensive and unbearable. Due to the digital mode, there comes a decline in the business sector (Subramaniam et al., 2021).

Similarly in Pakistan, the small and medium-sized enterprises undesirably affected that contribute 40% to the GDP with over 40% to export earnings. These businesses are run in both rural and urban areas throughout Pakistan, and account for a significant portion of the agriculture, manufacturing, retail, wholesale, trade, and service sectors. Due to the Covid-19 pandemic and government lockdowns, Pakistani firms faced a great loss in their business (Shafi & Junrong Liu, July 2020). Like other countries, Pakistan also faces the same pandemic. The inverse impact of Covid-19 is on different sectors, like education, industrial (manufacturing), agriculture, health, employment, services, and business sector. Similarly, Covid-19 has badly affected every sector both public and private sector in Khyber Pakhtunkhwa. Its impacts on the transport sector, education sector, social sphere of life, and industries without any discrimination. Similarly, the income of every sector was unwarrantedly disturbed due to covid-19 in the province of Khyber Pakhtunkhwa in every district including in its headquarter Peshawar. Thus, this study investigates the effects of Covid-19 on business activities in District Peshawar of Khyber Pakhtunkhwa and especially analyzes its impacts on the income of the small size businessman of indifferent markets in District Peshawar of Khyber Pakhtunkhwa.

Significance of the Study

The business sector plays a vital role in the GDP of Pakistan, while this sector is also a key factor in the reduction of unemployment. The business sector includes airlines, hotels, restaurants, industries, markets, etc. Covid-19 outbreak and lockdown restrictions affect different parts of the business in District Peshawar Khyber-Pakhtunkhwa. Peshawar is the main platform for business, while markets are the basic pillar of the business sector but due to their closure business sector is contracted. This study focuses on District Peshawar of Khyber Pakhtunkhwa.

The significant point of this study is that it explores the impacts of Covid-19 on Peshawar of Khyber Pakhtunkhwa as none of the study found on such topic in the specified area. This study investigates the impacts of Covid-19 on the income of the small size businessman of the District Peshawar of Khyber Pakhtunkhwa. This study is designed to provide critical information and knowledge about the chosen topic from respondents, recent studies or thesis, and related sites that are required for the expected importance to individuals. This study will serve as a tool to guide and navigate them in discovering credible, reliable, and comparable factors known as necessary data for further understanding of the topic.

Statement of the Problem

Due to the Covid-19 pandemic, World Health Organization (WHO) announced a lockdown in the globe. Covid-19 mostly affected the business sector which includes markets, international travels, transport,

real estate, industries, employment sector and educational sector, etc. Similarly, Pakistan also faced the same scenario in Covid-19. The government of Pakistan imposed a strict lockdown on markets, hotels, restaurants, airlines, industries vice versa. The employers are fired from their jobs due to the closure of different sectors and lockdown. In Pakistan, Peshawar district of Khyber Pakhtunkhwa which is the main platform for business also diminished. So, this study aims to examine the impact of Covid-19 on the business sector in District Peshawar of Khyber Pakhtunkhwa.

Research Objectives

The current study aims

i. To examine the impact of Covid-19 on total sales (business sector) in selected markets of District Peshawar
ii. To examine the impact of employment and age of business on total sales (business sector) in selected markets of District Peshawar

Hypotheses of the study

The study tests the following hypotheses (null hypothesis)

i. The Covid-19 isn't any impacts on total sales (business sector) in selected markets of District Peshawar
ii. The employment and age of business doesn't affect the total sales (business sector) in selected markets of District Peshawar

REVIEW OF LITERATURE

Literature review has an important place in the study of the problem. Its examine The previous work and leads towards new strategies for the study. Enormous work has been done to examine the impacts of corona virus on human being related things. There are some different studies which examining corona impacts on different sectors are given below.

Literature Review on China

Shen et al., (2020) examined the impact of covid-19 pandemic on Firm performance, showed that covid-19 had negative impacts on firm performances. Further the study examined the impact of covid-19 on industries and some specific regions. The findings showed that serious effected industries are tourisms, hotels, restaurants, transportation. Moreover, the serious affected regions were those areas where government imposed strict lockdown due to which production and consumption activities badly suffered. Hoque et al., (2020) investigated the impact of Covid-19 on tourism and airline industry of China. As covid-19 pandemic started from china, people intimidate to meet up with the people of China. The international tourists had cancelled their flights and other programs which were done before Covid-19, and worldwide countries also banned Chinese flights and tourists. All the Chinese flight had been cancelled by airline companies which were going to and from China for the stoppage of Covid-19 virus. The economy of China had affected at huge level, because the earning from tourism industry is about 127.3billion.

Wang et al., (2020) analyzed the Covid-19 effects on the insurance market of China and for this purpose they used the fixed-effects models. Covid-19 has had a major negative influence on China's insurance market in the short term, as a result of the restrictions on insurance marketing channels and the suppression of home insurance demand. According to them the commercial insurance premium income, yearly growth rate of premium, and insurance mass and deepness have all fall down 2.03%, 3.54%, 13.21%, and 0.44% due to Corona Virus diseases, while Covid-19 has had a detrimental impact on both property and personal insurance, from the angle of insurance density and `depth, the negative impact on personal insurance is greater than that on property insurance and in terms of insurance density and depth.

Lu et al., (2020) examined the impact of the Covid-19 pandemic on business sector, collected data from a sample of 4807 small and medium-sized enterprises (SMEs) in Sichuan Province, China. According to them most SMEs were unable to resume operations due to a lack of epidemic mitigation materials, employees' incapacity to return to work, interrupted supply networks, and decreased market demand. Many SMEs faced cash flow problems since they had to continue paying for numerous fixed expenses despite having little or no revenue. The outbreak greatly delayed the ability of SMEs to resume operations, putting extraordinary pressure on them, with each day of stoppage resulting in increased economic losses, such as rent, wages, and loans. As a result, most SMEs were eager to get back to work. However, returning to work involves more social interaction, which could lead to an increase in

illnesses. Furthermore, some periodic consumption, like spring festival, tourism, trade, cuisine and transportation industries are significantly affected due to covid-19 and it is difficult to mend this gap. Its means that the cash flow was severely disturbed. Similarly the corona virus halts the whole world transportation due to which the chain supply of china across the globe was diminished in that period. As a result, the majority of SMEs asked government policy assistance to overcome their existing and anticipated challenges.

He et al., (2020) used the synthetic index compilation method to examine the Covid-19 impact on Chinese industries. According to them pandemic had a substantial impact on the industrial and commercial, life and technology, and cultural and social industries are highly affected. The catering, hotels and restaurants are also affected, while the essential industries are comparatively stable. The manufacturing, sports, and entry value creation indexes all increased dramatically, whereas the hotels, catering, and residential services industries were severely impacted by the pandemic. The manufacturing, sports, and entrance cost creation indexes all increased dramatically, whereas the hotels, catering, and residential services industries were severely impacted by the pandemic. The services industries curve decline and their economic growth fall down. Medicines, health and medical utensils and internet industries achieved more growth in this period.

Tan et al., (2022) assessed the impact of corona virus on the industrial sector and economy of china through Computable General Equilibrium (CGE) model. To investigate the loss in economic system of china and find the direct loss in affected in seriously affected sectors, international sector and labor force. According to them the GDP growth rate was in between 4% to 8%, when there is no name of covid-19. But in 2020 the GDP growth would be in between -8.77% to -12.77%, and china GDP growth rate will be undesirable without any alternative actions or recovery approach.

Literature Review on Severely Affected Countries
The most affected countries from Covid-19 across the globe are as under follow;-
1.   Italy   2. USA   3. Spain
4. United Kingdom (UK)
Some of the literature regarding the effect of Covid-19 investigated by different researchers is summarized below

Literature Review on Italy
Pappalardo et al., (2022) find out the impact of Covid-19 on household Food in Italy and argued that the consumption and shopping patterns of people's food have been dramatically impacted by Covid-19. For significant analysis of household food waste in Italy they use a logit model. Household purchases of both amount and kind of food have increased as a result of worries about interruptions in the food supply chain. The environment could suffer as a result of increased food waste, which would result in higher greenhouse gas emissions and groundwater pollution. For this purpose they surveyed the whole Italy domestic food consumptions. Their findings demonstrate that despite a rise in food purchases during the lockdown, less food was wasted as a result of people purchasing more non-perishable foods. It's interesting to note that the main reasons for less food waste in Italy during the epidemic were worries about the pandemic's potential effects on the waste regulatory system and a desire to avoid adding to the system's stress. Although their study is among the first to look at food waste during the Covid-19 pandemic, more research is necessary to completely comprehend food waste at the household level during emergency situations.

Giacomo et al., (2021) studied the impact of Covid-19 on Italian accommodation: A supply-perspective, the contemporary Covid-19 epidemic has created an exceptionally influential and unsure surrounding in which agencies find it very hard to perform, especially those inside the hospitality enterprise. It's far consequently very critical to apprehend which moves hospitality companies suppose the personal and public sectors need to undertake with a purpose to deal with the pandemic and its impact. For this purpose they used a mixed method approach, based on a convergent parallel design data validation variant, a survey comprising both open-ended and closed-ended questions was created and distributed to a sample of companies. A total of 1,040 completed questionnaires were gathered and analyzed using descriptive statistics, and 361 open-ended responses were also examined thematically. The findings demonstrated a lack of long-term tactical thinking and the improvement necessary during such difficult periods, with Italian business owners and managers overly dependent on public sector initiatives and taking little commercial activities. This report provides hospitality industry organizations with crucial managerial insights that might be used to create future training programs that are

specifically targeted at SMEs' managers and entrepreneurs. Future training might include topics like encouraging creative company thinking and changing strategic orientation from short-term to long-term aims, strategies, and plans. The degree to which businesses are resilient during crises may rise as a result.

Literature Review on USA

Rodousakis & Soklis, (2021) gripped on the impact of Covid-19 on the US Economy: The Multiplier Effects of Tourism as a result of the pandemic's negative effects on tourism; they examine the multiplier effects on the US economy's gross domestic product, employment, and external sector. Our input-output model and the most recent input-output statistics from the database of the Organization for Economic Co-operation and Development (OECD) are used for this purpose. It was discovered that for every USD million decrease in tourism receipts, net output decreases by about USD 1.53 million, employment declines by about 16.86 people, and imports decline by about USD 0.20 million. Comparative analysis of these results with the economy's average multipliers shows that tourism is a significant sector of the US economy. Economy is evident through the assessment of the outcomes.

Alsharef et al., (2021) concentrated on examining the COVID-19 pandemic's initial effects on the American construction industry following the proclamation of a national emergency on March 13, 2020. 34 telephone interviews with project managers, engineers, designers, and superintendents who represented several states and diverse industry sectors in the United States helped to achieve the study's objectives (U.S.). The interviewees provided details about their personal experiences with the pandemic, including the positive and negative consequences they had, the opportunities it had opened them, and the risk management measures they had done. Significant project delays, the inability to obtain materials on schedule, decreased production rates, material price increases, and other negative outcomes were among those that were documented. Fast-track medical facility construction projects, residential building development, transportation-related jobs, and possibilities to hire qualified people were some of the new options that were made available. The risk management practices that were widely used were ones to improve project safety and lower other hazards. Employers were required to wear cloth face masks; social distance rules were implemented; construction activities were spaced out; COVID-19-related training was made available; and temperature checks were conducted before personnel entered the job, among other safety precautions. The creation of a task force team to examine the pandemic's development and make recommendations, arguing that construction enterprises should be seen as necessary to avoid delays, and utilizing government assistance programmes were all examples of actions taken to handle additional project risks. The study's conclusions will be helpful to stakeholders in the industry who is interested in learning more about the pandemic's first effects on the construction sector. Industry stakeholders may also develop on the results given and set up best practices for ongoing safe and effective operations.

Beckman and Countryman (2021) argued that the effects on the tourist and other service sectors have received the core of attention from COVID-19, although there has been an increase in interest in several agricultural and food themes, such as the drop in food away from home (FAFH) expenditures. In addition to the impact of COVID-19 on changes in agricultural production and trade, our analysis takes into account the significance of FAFH to the wider economy. In order to calculate the effects on the gross domestic product, we use a simulation model to collect data on real changes to these components as well as comparable shocks to non-agricultural sectors (GDP). According to their findings, COVID-19's impact on changes in agriculture has had a greater total impact on the U.S. economy than the sector's initial share of the economy. Still, the effects of non-agricultural shocks are three times greater than those of agriculture. We conclude that agricultural production/trade markets have been remarkably resilient during the pandemic after splitting the results down along the constituents and discovering that the decrease in FAFH spending is the biggest contributor to the change in GDP arising from shocks to agricultural markets. Due to the inclusion of information on actual demand, supply, and fiscal reactions to COVID-19, our results also show that our model (computable general equilibrium) does pretty well in estimating GDP in comparison to changes.

Literature Review on Spain

Norouzi et al.,(2021) scrutinize the impact of covid-19 on the electricity sector in Spain: an econometric approach based on prices. They study that the COVID-19 pandemic, in the opinion of the World Health Organization (WHO), represents the greatest threat to humanity since World War II. One of the nation's suffering greatly as a result of the COVID-19 pandemic outbreak is Spain. Energy supply becomes a

crucial and "impossible to predict" service in such a scenario, when the population is confined, hospitals are overflowing, and industry are shutting down. This highlights the analysis of COVID-19's effects on the selling price of electricity in Spain in a more thorough manner. Given the high degree of uncertainty in the global electricity markets, there is a research gap that needs to be filled, namely the development of new decision support mechanisms that can lower risks and ensure more significant forecasting for investments and energy management to deal with the effects of the current pandemic that appear to be unusual. To determine the effect of COVID-19 on the Spanish electricity market, this study analyses and creates econometric models. The model is established in this article, which is used to forecast how the dynamic electricity market would behave in times of change, such as the COVID-19 outbreak, is the main output of this paper. It is interesting that this study's outcome can be used to control the energy market and make critical decisions. As a result, the effects of negative and positive shocks on volatility are different. Electricity prices have demonstrated a leveraging effect, whereby price drops are accompanied by periods of extreme volatility and price increases by periods of lesser volatility. It was shown that volatility shocks generally tend to subside over a longer time frame. They are distinguished by periods of significant price volatility in addition to unpleasant shocks, whereas positive shocks exhibit lower price instability for electricity.

Pedauga et al., (2022) discussed that in the literature on small business economics, the relative importance of small and medium-sized enterprises (SMEs) and giant corporations is a recurring theme. The real and financial social accounting matrix (FSAM) presented in this study is able to separate the direct and indirect effects that are transmitted from micro-, small-, medium-, and big enterprises to the rest of the economy. We investigate the chain of events leading to shocks resulting from the COVID-19 shutdown using the hypothetical extraction technique (HEM). We determine how various business size categories contribute to the overall gross domestic product using a structural model of the Spanish economy (GDP). By showing that both SMEs and large firms are crucial for sustaining economic activity, their findings enable them to reconcile the contradictory narrative that surrounds the evaluation of the role performed by these groups in economic activity. Particularly, SMEs contribute to the explanation of 43% of income and two-thirds of the drop in unemployment brought on by the COVID-19 pandemic. Our findings further highlight the significance of sectorial analysis as a prerequisite for SME industrial policy.

Literature Review on United Kingdom (UK)

Su et al., (2022) their study's objective is to carefully examine how the COVID-19 epidemic has affected unemployment in five specific European economies. The research utilizes a Fourier causality test to achieve this during the time span of December 2019 to December 2020. According to Z-test findings, COVID-19 has significantly reduced unemployment in Germany, Spain, and the UK. The research demonstrates that COVID-19 instances contribute to unemployment in the UK, Italy, and Germany. In addition, COVID-19 contributes to unemployment in Italy and the UK in terms of mortality. Consequently, the article's findings show that the pandemic significantly raises the rate of unemployment in the economies, mainly those in Europe. That is among the virus's very few unfavorable effects on the labor market in Europe. New COVID-19 findings offer a trustworthy roadmap for how future policy changes may affect the labor market. It will be vitally necessary to be in front of the globe with an active labor market policy.

Literature Review on Pakistan

Javed (2020) investigated the impact of Covid-19 on the service sector of Pakistan, by using descriptive analysis and also use the secondary review to check the quantitative influence. According to Pakistan's 2019–20 survey report, the country's pace of growth is now negative for the very first duration, and the services sector's annual growth has also changed direction. The economy has suffered a significant handicap, and the country's unemployment rate and poverty was rise as a result of the decline in economic activity. Their research focused more specifically on how COVID-19 has harmed Pakistan's services sector, and it is found that industries like tourism, transportation, and hospitality have been particularly hard hit. The shutdown and subsequent implementation of standard operating procedure had a negative impact on the hospitality industry, as commercial activity was almost non-existent. In a similar way, the suspension of foreign flights and the restrictions on domestic travel had an impact on tourism income and the livelihoods of those dependent upon that industry. Due to the stoppage of mobility within provinces during the initial lockdown phase, the transport sector has also suffered

significant losses. SMEs in the service industry may not be able to survive one month on a cash flow basis due to the lockdown situation.

Ashraf et al., (2020) explored the effect of Islamic Equity Investments (IEIs) during the COVID-19 pandemic. According to S&P down Jones, IEIs kept performing better than its traditional counterparts during the first quarter of 2020. Due to the careful treatment of the IEIs and the potential hedging benefits utilized, this assertion has been made. The study's findings show that IEIs offer protection benefits during market downturns, and they suggest that these benefits come at a premium.

Ahmed, (2020) find out how COVID-19 has affected the performance of the Pakistani stock market (closing prices of the PSX 100 index for the first half of 2020 and data from COVID-19-related positive cases, fatalities, recoveries, and cases). According to the study's findings, only COVID-19 recoveries are a reliable indicator of stock market performance, while positive cases and deaths are not significantly related to market success. Additional research can be done by include other variables at a cross-national level, such as economic growth, interest rate, and inflation rate, in addition to the COVID-19 associated variables. Consequently, a precise description of the pandemic-related factors influencing a stock market's performance in this regard can be determined.

Burhan et al., (2021) inspect one of the worst economic shocks in recent history; the COVID-19 epidemic has had a significant negative impact on the hospitality industry. We investigate the fundamental elements and planning practices that affect the operational continuity of narrow businesses in the hospitality sector as they continue to grapple with the currently underway COVID-19 crisis in Pakistan because they are known to be relatively more susceptible to the economic complications arising from a crisis. Throughout interviews were conducted to fully understand the perspectives of shareholders using a descriptive method. According to the results, the most important aspects that influenced the quick modifications of operational activities in response to COVID-19 were systematic management, government backing, and friendly relations with stakeholders, businessman conscience, and shareholder interactions.

METHODOLOGY & RESEARCH FRAMEWORK
Area of the Study
The data was collected from three main markets located in district Peshawar, namely Saddar Market, Khyber Bazar Market and Karkhano Market. Though there are also some other markets in District Peshawar but these three markets are considered as main hub of business, that's why these three markets are selected as sample size for this study to investigate the effect of Covid-19 on the business in these markets.

Data Collection
The data was collected from different shops, malls, food streets, cosmetics and cloth markets in District Peshawar Khyber Pakhtunkhwa. Because the selected area is the main hub of the business sector in Peshawar Khyber Pakhtunkhwa, and large amount people are fired out from their jobs and the unemployment ratio increases in this area due to Covid-19 lockdown.

Procedure of Data Collection
The data was collected through questionnaires and interviews. The interviews method is used for that purpose because the shopkeepers are mostly illiterate. Secondly, due to lack of interest and time of shopkeepers, mostly the interview method is preferred.

Sample size of data collection
Approximately 300 shops was the sample size of data. The data was collected randomly from different shops, malls, food streets, cosmetics and cloth markets.

The following formula is used in order to find the sample size. Formula for sample size determination as described by (Yamane, 1967):

$$n = \frac{z^2 (p)(1-p)}{c^2}$$

Where: "Z" is the standard normal deviation set at 95% confidence level. "p" is the percentage picking a choice or response and "c" confidence interval.

Conceptual Framework of the Study
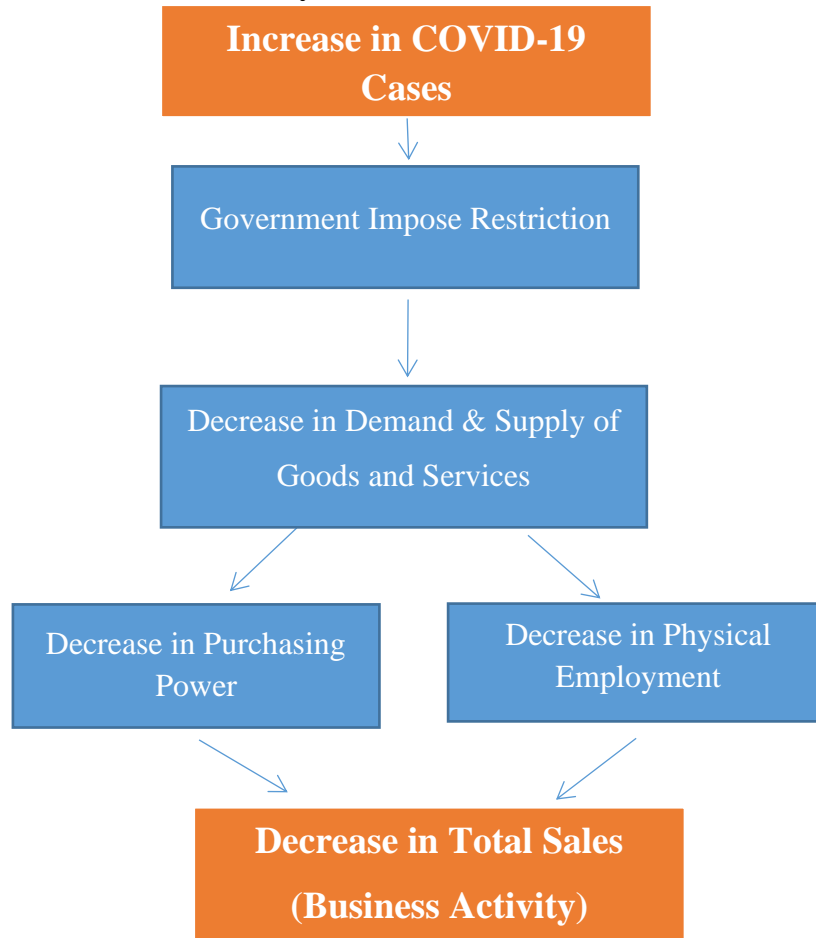
When Covid-19 pandemic cases were increased the government imposed restrictions. Due to restrictions the demand and supply of goods and services was adversely suffered. Further, due to decrease in demand and supply the people lose their jobs that also effect the purchasing power leads to decrease in total sales during pandemic situation (decrease in business activity) moreover, demand and supply also decrease when the sales decreases and due to their decline the future business activity will affected and moves downward.

Econometric Model

Pakistani society significantly values socialization and social activities, and people give lots of importance to social interaction. The implementation of lockdown and social distancing created disruption in many routine activities, in which one is the business sector. Financial constraints and pressures also contributed to the psychological difficulties as a large segment of the Pakistani population works in the private sector or belong to the daily wage workforce. As a result of the complete lockdown, the country has faced a serious halt to economic activities; many workers have either lost their jobs or faced significant cut in their salaries, contributing more to the already existing financial difficulties.

Since the emergence of COVID-19, many conspiracy theories and myths about the condition have been spreading in Pakistan that also adds in adverse effect on the economic activities and among the general public. Moreover, these lead to more uncertainty and increased unrest among the public. All these factors stress the need to explore the effect of Covid-19 on business sector in district Peshawar. For that purpose the following model will be regressed to examine the influences of the coronavirus pandemic in the selected markets. The theoretical model is

Business Total Sale = f (Covid, Employment, Age of business)   (1)

$$BTS= \beta o+B_1 Covid+\beta_2 Emp+\beta_3 AB+\mu \qquad (2)$$

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(BTS) represents the total sales of business sector and which is the dependent variable, COVID represents the number of cases or percentages of cases reported in selected area during the pandemic, (Emp) is used for the employment variable, (AB) represent age of the business and the last one is error term (μ) the right hand side variables are independent. The data will be collected and estimated on monthly basis.

Estimation Technique

Firstly, the reliability test is applied on the sample size collected data to examine that the reliability of the data for further analysis. For primary data reliability the most common and suitable test used is Cronbach's test.

In further analysis and in regression techniques, the descriptive statics analysis will be carried out to examine the means values and the correlation test is applied for in depth analysis of the relationship between the variables.

The Ordinary Least Square (OLS) model is applied for regression analysis and for finding of the impact of independent variables on dependent variable.

RESULTS AND DISCUSSIONS

The coronavirus first case was reported in February 2020 in Pakistan. Gradually the ratio of cases increased rapidly and the Covid-19 virus spread in all parts of the country, especially in major populated and urban areas of Pakistan including District Peshawar. Unpremeditatedly the government of Pakistan started light, moderate, and strict restrictions, and then in March 2020 due to the severe spread of coronavirus imposed a lockdown. The government announced a complete lockdown in compliance with closures of major markets, shopping malls, educational institutions, restaurants, wedding halls, etc. The imposition of lockdown not only created psychological pressures on the people but also hit social, economic, and business activities.so due to this, the business sector is adversely affected and the main business hub markets of district Peshawar that are Saddar Market, Khyber Bazar Market, and Karkhano market are also affected. That's why this study aims to investigate the effect of Covid-19 measures taken by the government of Pakistan in these three major markets of District Peshawar.

This research work provides proposed influence of the behavioural theory that more effectively explains the behaviour of the individuals during the specific situation (i.e. pandemic) and consumer, and seller adoptions which better makes sense of the relationship between social inclinations and speculation choices. The behavioural theory of bounded rationality stated that humans' hasty and erroneous judgments are caused by insufficient information, as well as emotional and psychological elements (Simon, 1995). Similar to this, the seller who works within cognitive/mental constraints limits their information and settles for less-than-optimal decisions sooner rather than later. Moreover, sometimes in such situations, humans base their decisions on gain and loss calculation disregarding the result or consequences.

This study provides a theoretical base for the behavior theory on the specific pandemic situation in support of the hypothetical model. The business sector preferred less information regarding uneven situations to reduce the risk of worrying circumstances as it may cause a mental error in their decisions, which could influence temporary or long-term speculation choices. So, businessmen mostly prefer financial benefit in such situations rather than loss aversion biasness.

Research & Data Collection Procedure

This study is conducted in three main markets of district Peshawar (Saddar Market, Khyber Bazar Market, and Karkhano Market) to analyze how covid-19 restrictions and lockdown imposed by the government influence the short-term business activities in these markets that also lead to an adverse effect on investment decisions, employment, financial and income of the businessmen. As the main hit of covid-19 restrictions is the business community, therefore, the target sample size for the data collection is the owners of cloth shops, restaurants, cosmetics, and other related sellers.

For the collection of data, the interview method of a self-reported questionnaire was adopted to collect the relevant data from these markets. For that purpose, a convenient sampling technique is used for data collection from the required population. The said technique is more economical, suitable, and convenient relative to other techniques such as experimental observation, group discussions, distributing, and collecting of questionnaires. Moreover, the interview method was preferred due to shortage of time with the acquired population, the skill of filling the questionnaire, lack of interest, and some population being illiterate.

After collecting and refining the data, the reliability test is applied to check the reliability of the data. The Variance Influencing Factor (VIF) test is run for Multi-collinearity. The Normality test is applied to characterize the basic properties of the data and the correlation test is used to examine the relation between the studied variables.

To examine the impact of covid-19 and in-depth analysis, the Ordinary Least Square (OLS) regressing technique is applied. The details outcome and discussion of all the applied tests are discussed below.

Reliability Test

Firstly in this research study, the Cronbach's Alpha test is applied to the data to check its reliability for further analysis. The reliability test is a useful method to check the internal scale of consistency in the gathered data. The most suitable test for testing the consistency and reliability of primary data is Cronbach's Alpha, so Cronbach's alpha coefficient test is applied as an indicator to examine the degree of consistency. Cronbach's alpha test represents the function of the number of observed items and the average of inter-correlation between the observational items. The conceptual formula of Cronbach's alpha is

$$\lambda = \frac{nv}{Z + (n-1)v}$$

In the above formula, "λ' denotes Cronbach's alpha value, "n" shows the number of items, "Z" is the variance "v" represents average covariance between or among the observed items. It is clear from the given formula that the number of items is directly proportional to Cronbach's alpha value, which means that as the number of collected data observations increases the chances of reliability in the data rise. Moreover, there is an inverse relationship between variance and Cronbach's alpha value, so as the variance in the data increases the chances of reliability decrease. The outcome values of the Cronbach's alpha test is given in Table 1.

Table 4.1: Reliability Test

Variables	Cronbach's Alpha
Business Sector (Total Sales)	0.873
Covid-19	0.916
Employment	0.927
Age of Business	0.865

The outcome for the reliability of the collected data given in the above table shows the consistency of the data. As the preferred and accepted Cronbach's alpha value for the reliability of data is above 0.6 and the obtained values of the variables used in this study are above 0.6, 0.873 for the Business sector (total sales volume), 0.916 for Covid-19 cases, 0.927 for employment and 0.865 for the age of business. So from the findings of Cronbach's alpha values, it is concluded that the data collected and used in this study are reliable and consistent and can be used proceeding for further analysis.

Test of Normality

The data collected and used in this study are also checked for normality to further confirm the reliability. The main determination of the normality test is to find that either the variable's data are normally distributed. The normality in the data is considered when the distribution curve passes in the mid of the edge and doesn't pass in the left or the right edge. The distribution curve plotted in Figure 1, demonstrates the curve is normally distributed and hence can be concluded that with the normality of the data.
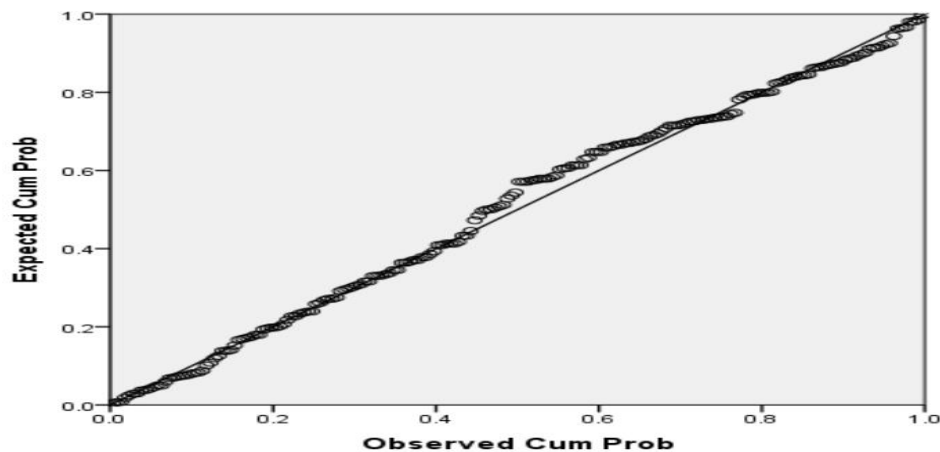
Figure 4.1: Normality Test Graph

Testing of Multicollinearity

When the data of the independent variables in a model are correlated with each other it results in multicollinearity. The high correlation between or among the independent variables creates biased and rigorous outcomes. The independent variables should be independent while regression of a model as the association is problematic, fitting the model and interpreting the finding if there is a high degree of correlation between the variables. Though multicollinearity mostly occurs in cross-section data, however, before analyzing the data used in this study is checked for linear correlation and collinearity.

The most common test used to test the problem of multicollinearity in the data is Variance Influencing Factor (VIF) test. In this study too the VIF test I applied and the findings are given in table 2.

Table No. 2 Multicollinearity Test

Variables	Collinearity Statistics	
	Tolerance	VIF
Business Sector (Total Sales)	0.829	1.271
Covid-19	0.836	1.187
Employment	0.782	1.391
Age of Business	0.947	2.014

As indicated in above table 4.2 the values of VIF for all the independent variables are less than 5 and the tolerance values are high than 0.2, showing that the variables are not linearly correlated with each other and thus reject the chances of multicollinearity.

Correlation Analysis

The correlation analysis is carried out to examine the relation between the studied variable and the finding of the test is given in table 3.

Table No. 3 Correlation Analysis Results

Variables	Total Sale	Covid-19	Employment	Age of Business
Total Sale	1	-0.852	0.738	0.485
Covid-19	-0.852	1	-0.648	0.271
Employment	0.738	-0.648	1	0.672
Age of Business	0.485	0.271	0.672	1

The above findings of the correlation analysis show that covid-19 is an inverse correlation with the business sector in the studied markets. The study concluded that covid-19 adversely suffers the economic and business activities in the main three markets of district Peshawar as there exists a negative correlation relation between covid-19 and total sales. Moreover, the correlation between employment and Covid-19 is also negative that indicating that Covid-19 effect on employment status is adversely in the studied time period and area.

The correlation analysis shows that there is a strong positive correlation exists between total sales and employment, imparting that employment plays a vital role in increasing total sales by dealing with the customer in an effective way which influences the business sector activity. Thus from the findings of the correlation analysis, it is concluded that employment plays a key role in enhancing the total sales in Saddar Market, Khyber Bazar Market, and Karkhano Market.

The findings show a weak correlation between age of business and Covid-19, however moderate correlation exists between the age of business and employment status. From the moderate correlation between age of business and employment, it may be concluded that with the passage of time the business is expanding which requires more labor and thus hiring of labor increases.

Estimation of the Model

To empirically examine the impact of Covid-19, employment age of business (independent variables) on sales volume (dependent variable) in main three markets (Saddar Market, Khyber Bazar Market, and Karkhano Market) of district Peshawar, the Ordinary Least Square (OLS) technique is regressed and findings of the model is summarized in given table 4

Table No. 4 OLS Regression Results {Business Sector (Total Sales) as Dependent Variable}

Variables	B	Std. Error	T	Prob. Sig.
Covid-19	-0.743	0.197	-3.760	0.0021
Employment	0.568	0.176	3.217	0.0073
Age of Business	0.035	0.017	1.948	0.0613
R Square	0.843		Adjusted R Square	0.829
DW	1.937		Sig. Prob	0.0000

The findings of regression analysis show that the value of R^2 is 0.843 determining that the model successfully elaborates the eight-four percent variation between dependent and independent variables, so the model is considered good and fit. The findings also show that the Durbin-Watson (DW) test value is near to the desired value and thus there is a rare chance of auto0correlation that may lead to irregular desired values. Moreover, the overall values and model significant probability value is highly significant indicating that overall the regression results are robust and considerable rejecting any major error or biasness chances.

The covid-19 adversely affects the social, political, economic, daily, and business activities throughout the world. There will be none of the country, city, area, or region that was not adversely affected by the Covid-19 pandemic. However, some areas are affected more while some are less, that's why this study is investigating the specific business activity area to examine the effect of covid-19. The main objective of this research study is to find out the impact of Covid-19 (restrictions and lockdown) on the business sector activities (i.e. the total sales of the businessmen and shopkeepers in the three main markets of district Peshawar). The regression results given in table 4.4 revealed that Covid-19 has negatively affected sales during the study period as expected and practically observed. The regressor value for Covid-19 is 0.743 significant and negative that revealing that during the covid-19 government restriction and imposition of strict or moderate lockdown, the sales of the businessmen and shopkeepers were adversely affected and minimized by up to seventy-four percent. Moreover, the sales decrease also affects the income, overall wealth, and other social and economic activities of the peoples in the study area. The covid-19 has also psychological stress that has a significant inverse relation with business sector activities.

The covid-19 also affects employment status almost in all the world countries. Employment status plays an important role in raising the welfare and well-being of families and society. Moreover, employment has a positive impact on the income growth of the individual and the household sector. The overall family, economic activity society and individual get a range of economic and social benefits by increasing employment opportunities. Employment has dual functions in the business sector. Firstly it provides assistance and help both to consumers and producers and secondly, it provides income for economic activities through earning of wages or salaries. So, due to covid-19, the government imposes restrictions due to which the employment status is adversely affected and most people lose their jobs due to closures of business activities. This study regressed the effect of employment on the business sector and found a significant effect on total sales of employment in the studied market. The results indicate that employment has a significant fifty-eight percent momentous effect on total sales.

However, during the covid-19 most individuals lost their jobs, so the business activity and income of the working people also suffered in the study area and as well as in all over the country too.

This study also regressed the age of business as a factor to examine its effect on the total sales in the studied market. Though experience is considered good and mostly has an affirmative effect, however, in this study the age of business on total sales is very less and positive. The main reason for that may be that in the study area, these are the big markets containing a lot of shops and the maximum number of consumers. Moreover, these are considered big markets of the province too and many new peoples across the province also visit the shops located in these markets. In view of the researcher of this study, this is the sole reason that age of business remains less effective in the studied markets though it may have an influential effect in other markets.

CONCLUSION

The main theme of this study was to investigate the impact of Covid-19 on business sector (total sales) in main three markets of district Peshawar. For that purpose the researcher analyse the data through Cronbach alpha to check the reliability and uniformity for more investigation. As from the results of Cronbach alpha it is determined that the collected data and used in this research are reliable and consistent while the data might be used for extra exploration. Moreover the data are also checked by normality test to endorse the reliability and investigate the variable's data are normally distributed or not.

The Figure.1 concludes that the data is normally distributed. The researcher used the VIF test in that studies to checked the multi-collinearity. As in analysis chapter the VIF values for independent variables are less than five (5) and values of tolerance are more than 0.2 which shows that there are no chances of multi-collinearity. In correlation analysis the researcher investigate that there is indirect correlation between Covid-19 and business sector in the selected areas and there is negative correlation between total sales and Covid-19 due to adverse effect of Covid-19 on business activities.

Further their negative correlation between employment and Covid-19 which shows the employment rate is also disturbed. The analysis show that in between total sales and employment are positive correlation that indicated employment play a vital role in increasing the total sales in these three selected studies markets. The result of that data analysis shows the weak correlation between age of business and employment. Finally the regression (OLS) analysis indicates that the R^2 value is 0.843 which shows the model is considered good and fit and there is no auto-correlation, because the Durban Watson value is close to desire value.

RECOMMENDATIONS

The following recommendations are drawn

i. Government of Pakistan needs to prefer and impose smart lockdown instead of complete or total lockdown.
ii. Special funds for effectives like business sector and especially for daily workers
iii. Quick measures for restoring of business activities after occurring of any undue accidents or disaster.
iv. Proper awareness campaign especially in rural areas.
v. Proper and in time vaccination should be provided.

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