

COVID-19: The Pandemic's Impact on Economy and Stock Markets

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Abstract

As we wrestle with the outbreak of novel Coronavirus in an increasingly interrelated world, the virus is causing economic mayhem and large-scale loss of life. With more than 53.36 Million confirmed cases and more than 1,683,000 deaths globally to date, it is now believed to be a global disaster to what was initially considered as a largely China-centric subject. Asia, Africa, Europe, Australia and America, all are grappling with its enormity and aftermath. This pandemic has pushed the world's economy towards the depression and raises a question for economists as how to manage financial stability? Governments are taking serious steps to deal with this life-threatening disease. Pakistan will inescapably be impacted by both the domestic and global developments arising from the outbreak of the pandemic. The country was earlier on the road to slow recovery under the umbrella of an IMF bailout package. Now the process of growth could be hampered severely, leading to a massive increase in hunger, poverty and unemployment. Focusing this discussion, the study aims to present some fruitful information about the global stock markets with a particular focus on the stock market of Pakistan. The study has taken into loop the performance KSE-100 Index from the period of January, 2020 to April, 2020. The stock prices data of KSE-100 index companies has been collected from the official website of Pakistan Stock Exchange. Findings reveal that KSE-100 Index is revolving around the bullish and bearish pools.

Keywords: pandemic, COVID-19, stock returns, Pakistan Stock Exchange

Introduction

Health Officials all around the globe are advising the people to adopt social distancing in order to subdue the impact of COVID-19. As necessary, this advice not only stands right from a medical standpoint, but there's a flipside to save the whole world from the foreseeable future (Kurt, 2020). The deadly COVID-19 virus has killed more than 1,683,000 people and infected more than 53.36 million, as of this writing. The Major concern is not only our health but also our livelihood. The risk level associated with COVID-19 escalated in March as per its spread to greater than 200 destinations (Zhang et al., 2020). The fallout, according to the WTO chief, "may well be the deepest economic recession or downturn of

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our lifetime.” Moreover, the World Trade Organization has forecasted that global trade could fall up to a third in 2020.

World economies struggling with rising unemployment

Yearly unemployment rate change, 2019-2020

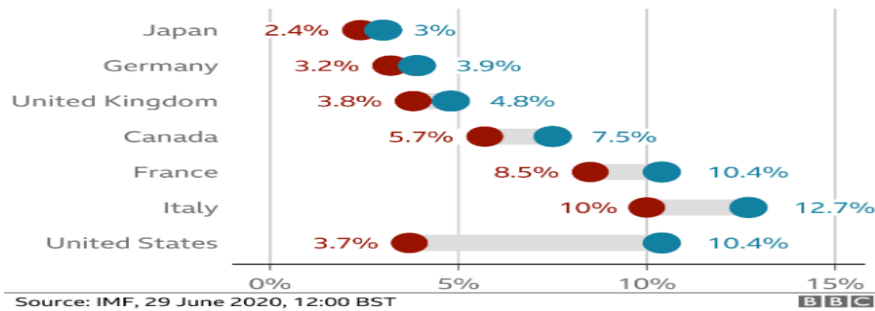


Figure 1: Rising Unemployment during COVID-19

The coronavirus pandemic is hammering the world’s biggest economies and could cause the deepest global recession in generations with per capita income shrinking in the largest fraction of countries altogether since the year 1870 (Adrian & Natalucci, 2020, World Bank, 2020). According to the IMF, the world economy is expected to decline by 3% in 2020 as economies all around the globe are shrinking at the fastest pace in decades. The Fund has described this downfall as the worst since the Great Depression. According to the chief economist of IMF, Gita Gopinath, over the next two years, this epidemic would knock \$9 trillion off the global Gross Domestic Product (Chan, 2020). On the other hand, the World Bank has predicted 5.2% contraction in global GDP based on the global economic prospect report of June 2020.

The IMF has dubbed this crisis as “The Great Lockdown”. Italy and Spain are the countries which have received the worst hit in Europe by the Coronavirus epidemic. The IMF has predicted a challenging situation in both countries, where GDP is expected to shrink by 9.1% in Italy and 8% in Spain (Amaro, 2020). Similarly, the IMF forecasted 1.4% Gross Domestic Product growth of the United Kingdom; however, now the same institution is predicting 6.5% contraction of the economy in 2020. The economy of the US is also expected to shrink by 5.9% in 2020, which would be the biggest fall since 1946. Unemployment is also expected to touch double-digit (10.4%) in the current year. The Australian economy is expected to face its first recession since 1991. The Chinese economy is expected to grow by just 1.2% in 2020, which would be the slowest growth since 1976 (Chan, 2020).

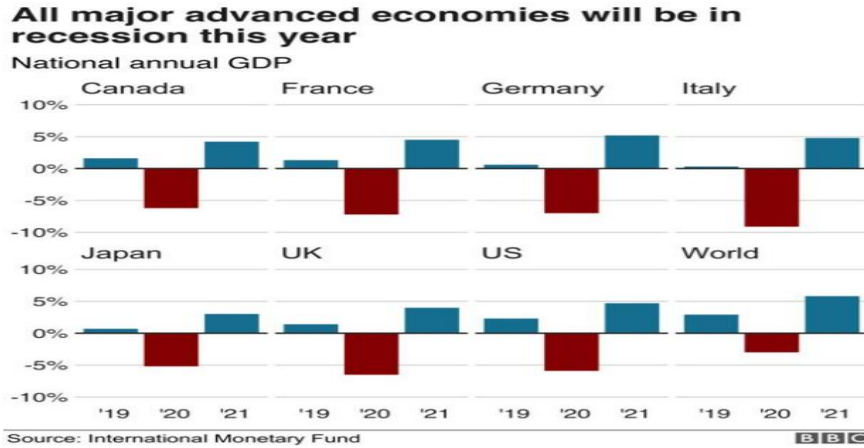


Figure 2: Prediction about World Economies in 2020

Indeed, some particular industries hold the most of the damage. Restaurants and shops closed their doors and started to empty out. Non-essential and essential national and international travel bans have adversely affected the airlines, cruise-ship operators and all those industries related directly or indirectly with tourism. The list is very long. On the other hand, some apparently unrelated industries can also feel the heat of COVID-19. For example, the banking sector may have to absorb more non-performing loans as a part of its customer base loses business/work. Manufactures other than the medical field may see a considerable reduction in orders due to social distancing (Kurt, 2020).

Huge drop in shoppers

Annual percentage change of footfall in 14-20 June

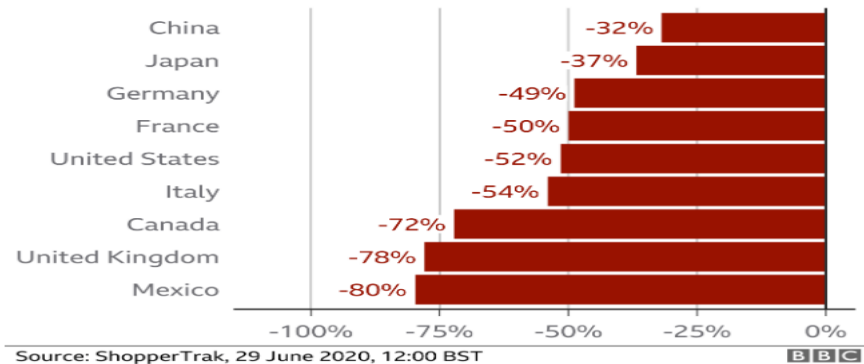


Figure 3: Drop in Consumer Footfall

The IMF has issued a warning that growth in developed economies to its pre-virus peak would not take place until at least 2022. If the pandemic is not controlled timely and there is a second wave of COVID-19 in 2021, it is expected that it would knock off an additional 8%

global Gross Domestic Product points. As far as heavily-indebted countries like Pakistan are concerned, the situation may trigger a downward spiral and the investors would not be willing to lend in some of these economies, which would surge the borrowing costs. The IMF added: "This increase in sovereign borrowing costs or simply fear of it materializing, could prevent many countries from providing the income support assumed here" (Chan, 2020).

As far as Pakistan is concerned, the IMF has projected that economy of Pakistan would contract by 1.5% in 2020, compared to 3.3% growth in 2018-19. However, the IMF has forecasted growth of 2% for the Pakistani economy in 2021. Meanwhile, the World Bank expects the growth of the Pakistani economy to remain muted at 0.9% in 2020-21 before reaching 3.2% in 2022 (Kiani, 2020; Rana, 2020). The IMF has further forecasted the CPI to rise by 11.1% in the current year before going to 8% in the next year. Moreover, the Fund has also estimated the current account deficit to reach 1.7% of GDP in the current year and 2.4% in the next financial year. The IMF also projects the unemployment rate of Pakistan at 4.5% in 2019-2020 and 5.1% in 2020-2021 (Kiani, 2020; Rana, 2020). According to the IMF, its predictions are highly uncertain and the economic cost of the COVID-19 crisis would be worse than currently predicted. An economy can recover from the current crisis by taking quick and effective measures to contain the widespread of the virus, limiting the unemployment and easing financial pressures (Elliott, 2020). Together, financial, fiscal and monetary policies must aim to cushion the impact of the current epidemic and to strategize sustainable and consistent recovery once the crisis is under control. Moreover, in order to attain the success in containing the financial stability and restoring the market confidence in developing countries, continuous and close global coordinated economic and health policy efforts would be indispensable (Adrian & Natalucci, 2020; Bluedorn et al., 2020).

The stock market of Pakistan has faced ping pong effects from January to date. At the start of the year, there were positive expectations about the future of the economy and stock market as well. The CEO of NBP Funds stated that in the current year, the interest rate and inflation rate would decline. Similarly, the positive indication was established for the decline in current account deficit and imports with the corresponding increase in the exports. Moreover, the transfer of money from real estate to the stock market was expected by means of initiation of documentation for real estate. However, the positive expectations were of temporary nature. The lockdown imposed by the government to control this pandemic has not remained fruitful for the stock market. During March, the KSE-

100 Index remained at 5-year low. It has not been as low since March 2015. Market Halt and other measures were employed to save the investments of market participants. The insights of Pakistan stock market and the performance of KSE-100 Index have not been elicited in the previous researches. As to the writing of this paper, the researchers could not find any study in the context of Pakistan addressing the performance of KSE-100 Index concerning the COVID-19 pandemic. Keeping in view this detailed discussion, the objectives of this current debate are presented as:

Research Objectives

1. To present some fruitful information about the global stock markets
2. To present some significant insights of Pakistan stock market.
3. To present the performance of KSE-100 Index by using real time trading data.

Methodology

The current research work intends to provide some fruitful insights about the global stock markets. It also aims to focus on the stock market performance of Pakistan. Pakistan Stock Exchange (PSX) consists of 35 sectors which are further categorized into different companies as per the nature of business. KSE-100 Index is the leading index of PSX. This index is market capitalization-based index. KSE-100 index consists of 100 top most performing companies listed in the PSX. These companies are selected from the 35 sectors of PSX as per their functioning. The composition of index changes from time to time depending on the performance of companies. The purposive sampling has been used as the research is progressed to achieve a specific objective. The study has taken into loop the performance of these 100 companies from the period of January, 2020 to April, 2020. The stock prices data of KSE-100 index companies is collected from the official website of Pakistan Stock Exchange. These stock prices led to the calculation of stock returns, which are further utilized to probe into the performance of KSE-100 index companies during the Outbreak of COVID-19 Pandemic. Stock returns were calculated by applying the formula $LN(P_t/P_{t-1}) * 100$.

Some Interesting Facts about Global Stock Markets

The turning of 2019 and rising of 2020 faced the effects of COVID-19. This pandemic has pushed the world's economy towards the depression and raises a question for economists as how to manage financial stability? (Boot et al., 2020). Emerging literature is available on the effects of COVID-19 on financial markets (Akhtaruzzaman et al., 2020). COVID-19 pandemic is a significant cause of financial volatility leading to risk management activity (Albulescu, 2020; Bakas & Triantafyllou, 2020; Liu et al., 2020; Okorie & Lin, 2020; Zaremba et al., 2020). The worldwide increase in COVID-19 pandemic cases significantly affected global financial markets (Erdem, 2020) The incident of the global stock market crash of 2020 was instigated on 20th February 2020 (Samuelson, 2020), since the pandemic of the Spanish Flu of 1918 (Chakrabarti & Martin, 2020). The day of 19th February 2020 was the bullish day for the Nasdaq Composite Index and S & P 500 Index. However, such a record high was reached at the bottom on 20th February 2020. Following the global financial crisis, the majority of the global stock markets reported the most substantial one week decline, i.e., 24th-28th February 2020 (Smith, 2020). Moreover, downward pressure of 25% was observed during March 2020 in G-20 countries. Global stocks reported severe contradictions on 9th March 2020, as a result of COVID-19 as well as oil price war between Russia and OPEC countries, put forward by Saudi Arabia (Partington & Wearden, 2020). This wickedest day was known as "Black Monday I". (Partington & Wearden, 2020). On Black Monday I, the DJIA were declined by 1800 points (Ruhle, 2019); as a result, the trading was halted for 15 minutes. The Nasdaq Composite was dropped by 620 points and S & P 500 Index was fallen by 7.6%. (*Fortune*, 2020), oil prices by 22% (Defterios, 2020), Canadian's S & P Composite Index by 10%, (*Financial Post*, 2020), London's FTSE-100 Index by 7.3% (Marris, 2020), Similarly, the Asian Markets (Japan, Singapore, Philippines, Pakistan, China, India and Indonesia) also faced the sudden jerk and declined by 20% (Vishnoj & Mookerjee, 2020), Japan's Nikkel-225 went down by 5.1% (He et al., 2020), Singapore's Straits Times Index by 6.03% (Kit, 2020), China's CSI-300 Index by 3.0% , Hong Kong's Hang Sang-Index by 4.2% (Price & Choi, 2020), Pakistan's KSE-100 Index by 3.1% (Talqeen, 2020), India's NSE Nifty Fifty by 538 points. After three days of Black Monday I, the Incident of Black Thursday (12th March, 2020) was happened with record fall in European and North American Markets by 9%. Since the Black Monday of 1987, Wall-Street experienced the

single day record downfall. Moving forward, the stock markets reported their best day on 13th March, 2020. Irrespective of this, when the Wall-Street markets were reopened on 16th March, 2020, they showed a highest downfall of 12%. (Imbert, 2020b), The Demise of “Black Monday II” was reported on 16th March, 2020. Asia Pacific and European Stock Markets were closed down with severe drops in index points (Huang, 2020b), Such a depressed situation continued from the middle of March, 2020 to date.

The impact of coronavirus on stock markets since the start of the outbreak

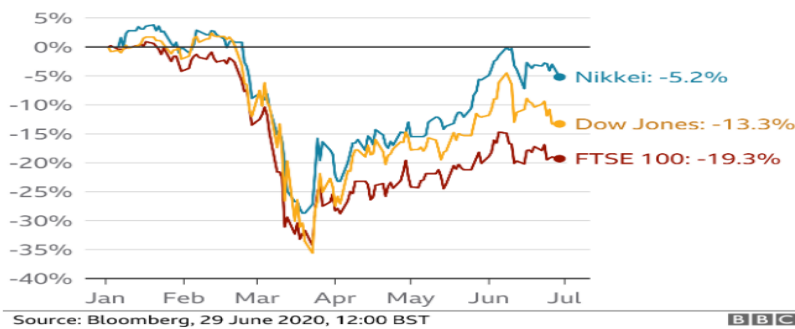


Figure 4: Impact of Coronavirus on Stock Markets

The Case of Pakistan Stock Market

The stock market of Pakistan has faced ping pong effects from January to date. The performance of the Pakistan Stock Exchange (PSX) was boosted in the sense that Index risen from 34000 points to 40000 points from July 2019 to January 2020. The Index reached the 17 months record level of 43207 points. The bullish trend was continued during the starting days of January, i.e. on 10th January 2020, and KSE-100 Index was increased by 632 points. The Index crossed 43000 points comparing the last months. This trend continued for some other days of January; after that, the stock market was stuck in severe, long-lasting bearish trends. The bearish trend of January continued in February as well. The month of February 2020 was also with full of negative hopes for the investors. Even the start of the month demonstrated a downward trend for the investors. The KSE-100 Index went down by 1000 points on 3rd February 2020. This so-called “red zone” was attributed to heavy selling in all sectors of the stock market, political instability, and the pandemic of Coronavirus, COVID-19 (Ahmed, 2020).

The start of March 2020 somehow showed a bullish trend. The 2nd March 2020 was also considered as a dream day. KSE-100 Index showed an upward drift of 1000, thereby left a positive signal for the investors. This increase was attributed to the decline in the inflation rate and

petroleum products. This bullish trend was observed after the severe bearish week, which was ended on 28th February 2020. However, the upward swings were of a temporary nature. During the month of March, the KSE-100 Index remained at a 5-year low. It has not been as low since March 2015. It went down at an overwhelming rate of 37% from January to March. Out of this, the drop-down of 30.8% was recorded on 5th March 2020, due to COVID-19 Outbreak. The Index was at 27000 points and blue-chip companies were in a panic situation (*Ahmed, 2020*).

To manage such a worse situation, the lockdown strategy was taken in action. PSX elicited 1st Market Halt on 9th March 2020 at 9:37 am for 45 minutes. The SECP introduced the procedure of Market Halt in December 2019. The Market Halt was employed when the “KSE-30 Index moved 4% either way and remained for 5 consecutive minutes”. During this process, PSX ran Market to Market activity as a risk management measure; however, all trading operations became suspended and it was termed as “cooling off period”. The Market Halt process was employed to protect investors from market volatility. On the day of Market Halt, KSE-100 Index was declined by 2400 points. On 12th March 2020, PSX Halt was also activated and Index plunged by 1716 points. Following this consistent downside situation, the Market Halt was first time increased from 45 minutes to 120 minutes. Nevertheless, it was again reduced to 60 minutes on the request of the market participants. PSX has to face one more Market Halt on 13th March 2020 at 9:25 am for 45 minutes. KSE-100 Index was dropped by 1600 points on the same day. However, after the trading was resumed, Index goes up by 900 points, thereby showed the somehow bullish trend. Following the same situation, another Market Halt was taking place on 16th March 2020 due to intense selling pressure. It was the 4th Halt, happened in the two weeks. During this Halt, the KSE-30 Index was declined by 5% for 5 minutes, as compared to the previous halts of 4%. The Halt was employed for 45 minutes, just like the 1st Halt. On that day KSE-100 Index was fallen by 2300 points, dropping to a four-month low (*Ahmed, 2020*).

PSX triggered another Market Halt on 18th March 2020 for 45 minutes. At that time, the KSE-100 Index lost 2201 points. Another Market Halt was taken place on 24th March 2020 due to 5% decline in the KSE-30 Index. On that day, the stock market was opened two hours late at 11:30 am and triggered the Halt at the same time. After resuming the operations, the KSE-100 Index was declined by 2044 points. To handle the current situation, PSX launched the Exchange Traded Funds (ETFs) namely; “UBL Pakistan Enterprise and NIT Pakistan Gateway, to join the list of world stock exchanges offering the ETFs. PSX faced another

Market Halt on 25th March 2020 as a result of 5% decline in the KSE-30 Index. KSE-100 Index was dropped by 1336 points on that day. It was the 7th Market Halt, activated in the same month.

The month of March 2020 can be considered as the worst month in the history of PSX after December 2008 and the KSE-100 Index was declined by 8752 points. However, the month of April 2020 brought some good news for the investors. PSX showed a bullish trend and the KSE-100 Index goes up by 1000 points on 2nd April 2020. On 9th April 2020, the performance of PSX goes up after the announcement of \$ 1.4 billion loan by the International Monetary Fund (IMF) under the Rapid Financing Instrument (RFI) to face the challenge of COVID-19. The market showed an efficient and quick response and the KSE-100 Index goes up by 900 points. This was considered as the “Green Zone” for the PSX (Ahmed, 2020).

Quick Overview of the Performance of KSE-100 Index (January, 2020 to April, 2020)

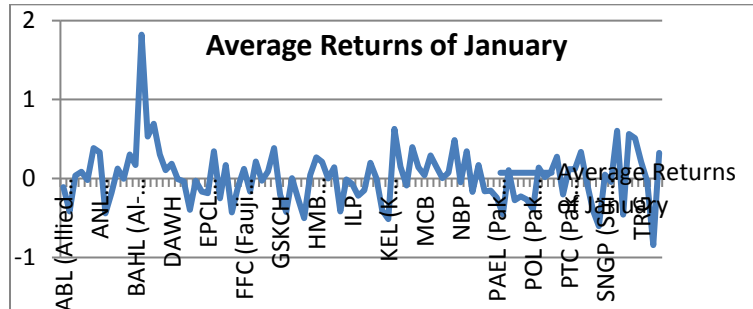


Figure 5: January Returns of KSE-100 Index

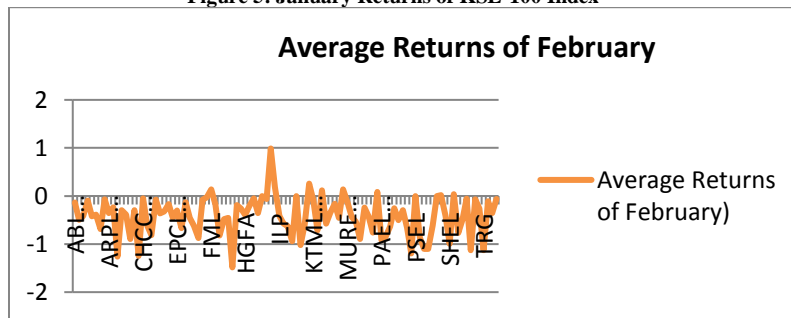


Figure 6: February Returns of KSE-100 Index

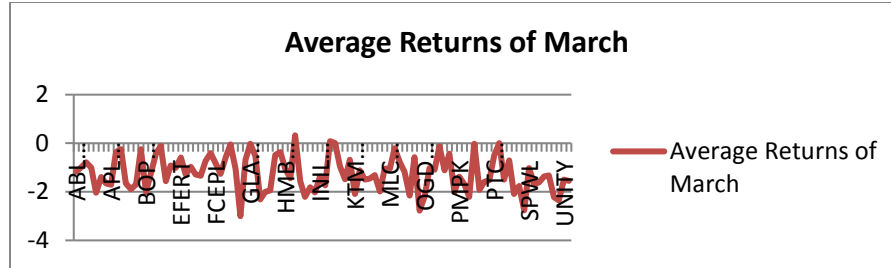


Figure 7: March Returns of KSE-100 Index

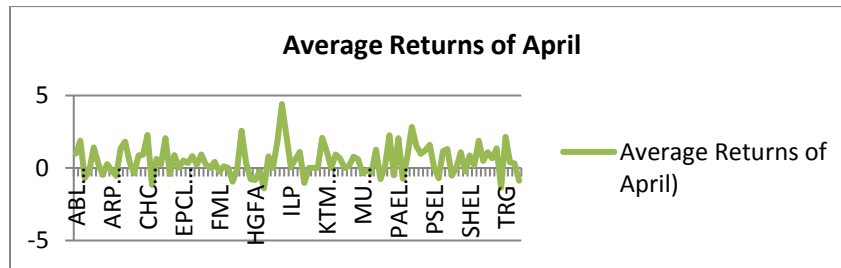


Figure 8: April Returns of KSE-100 Index

Summary of Findings

Figures 4,5,6, and 7 show the graphical representation of stock returns of the KSE-100 Index which consists of the top 100 performing companies of the PSX. These companies are selected from all 35 sectors of the PSX based on their market capitalization.

Referring to the January returns, as the Pandemic was at its very initial stage in Pakistan, the mixed-effects were observed. Some companies demonstrated positive performance, and some revealed adverse effects. The COVID-19 was spread gradually in February and influenced the economy at a larger level. The returns of February, 2020 were evidenced for such influence. Excluding some companies, the returns of many companies showed a negative trend. This negative trend went on increasing and March, 2020 can be considered as the most horrible month in the history of the stock market. The situation even worsened than February. The lockdown was employed to protect the economy and citizens from such a life-threatening virus through social distancing

As a result, the majority of companies experienced a downturn in their performance. Moreover, such depression prevailed in the stock market during March. The Market Halt of PSX was also taken to provide some relief to the stock market. At the same time, the major Stock Indexes of the world, like, S&P 500 Index, New York Stock Exchange, Nasdaq Stock Market and many others also experienced the same crisis. The stock markets showed the bearish trend and this Panic left out the ever-lasting effects on the investors. The month of April somehow brings the blessings for the investors of Pakistan. The stock market uplifted and the Index goes upward. The majority of Indexed Companies revived and got positive returns, as shown in Figure 7.

Conclusion

Contrary to the financial market crash of 2008, the pandemic of 2020 has severely hit the corporate sector, and its impact is increasing day by day as the production and distribution sectors around the world are largely interconnected. Governments are taking serious steps to deal with this pandemic. The stock markets of different countries have collapsed in March 2020. This downturn in the world indices badly affected the global economic conditions and also opened the risks of financial instability. The stock market of Pakistan has faced ping pong effects from January to date. However, the positive expectations were of a temporary nature. The lockdown imposed by the government to control this pandemic did not remain fruitful for the stock market. Market Halt and other measures were employed to save the investments of market participants. According to the IMF, the economic cost of the COVID-19 crisis would be worse than currently predicted. An economy can recover from the current crisis by taking quick and effective measures to contain the widespread of the virus, limiting the unemployment and easing financial pressures (Elliott, 2020).

Limitations and Recommendations/Managerial Implications

The study has some limitations which future researches can incorporate to make a valuable contribution in the field of COVID-19 research. The current research work has just focused on the KSE-100 Index to investigate the impact of pandemic on the stock market. The insights of Pakistan stock market and the performance of KSE-100 Index have not been elicited in the previous researches. As to the writing of this paper, the researchers could not find any study in the context of Pakistan addressing the performance of KSE-100 Index concerning the COVID-19 pandemic.

This research is a bit different in a sense it covers the actual period of earthquake (referring to the pandemic trigger) rather than aftershocks. Therefore, this study has focused on the data from January 2020 to April 2020. This is a case study and the figures mentioned in the research paper indicate the shocks at the start of pandemic. This paper provides very useful insights regarding the early impact of pandemic on the performance of world markets in general and PSX in particular. Moreover, Literature provided is critical neither favorable nor unfavorable. The current study also has some implications for policy makers. The regulatory authorities can formulate comprehensive framework so as to protect the stock market from the aftermaths of COVID-19. They can guide investors about how to make consistent short term and long-term investment decisions. In addition, the policy makers can focus on improving the performance of different sectors of PSX so as to improve overall market efficiency.

Implications

Future researchers can emphasize on all the listed companies of Pakistan Stock Exchange to have a detailed picture of its performance. Future researchers can conduct a comprehensive study by considering the South Asian Stock Markets or other Leading Indices of the world. Moreover, future scholars can examine the impact of COVID-19 on the investor's behavior i.e. herd behavior in stock markets. In addition, the researchers can shed light on the impact of pandemic on stock market volatility.

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