Effect of COVID-19 Pandemic on Global Stock Market Values: A Differential Analysis

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Abstract: This paper presents a current analysis of the effect of coronavirus pandemic on select global stock indexes (SSE Composite Index [China], Euronext 100 [Europe], Dow Jones Industrial Average [United States of America]. The objective of the paper is to evaluate the extent and direction of the differential effect of COVID-19 pandemic on select world stock index. The data on stock value performance were gathered for fifty days before and fifty days within the Coronavirus epidemic; data were analysed using the paired t-test of difference in mean stock values at an alpha level of 0.05(5%). The results reveal that the COVID-19 pandemic has different effects on the stock markets. Dow Jones Industrial Average showed a significant reduction in mean stock value during the coronavirus period, Chinese Stock Exchange Composite Index experienced a significant increase in mean stock values during epidemic higher than before the epidemic. On the contrary, the S&P 500 and the Euronext 100 indexes show a non-significant difference in mean stock price. The paper provides direction to stock market participants, investors and speculators regarding a safer investment destination during this time of COVID-19 pandemic; the paper serves a good case study for class room teaching and also provides direction for further research. This paper provides the first empirical research on the early effect of COVID-19 pandemic on three global important regional stock indexes, which finds that some stock markets such as the Shanghai Composite Index is resilient to COVID-19 pandemic.

Keywords: Stock Markets; Stock values; Investment; Epidemic; COVID-19; Black swan theory; Euronext 100; Shanghai Composite Index; S&P 500; Dow Jones; Unexpected event

JEL Classification: M21; M2; G1; G18

1. Introduction

This paper examines the differential effect of the current COVID-19 pandemic on select global stock indexes. This is currently very important and well-timed given that stock market history on the effect of past pandemics has mixed results (Donadelli, Kizys & Riedel, 2018); and these mixed results confuse contemporary

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stock market participants regarding what to expect from and what to do within this period of novel COVID-19 pandemic.

The current ravaging outbreak of coronavirus (COVID-19) is a proof that good health is the prime engine of economic activities and economic growth (Meer et al. 2003; Bloom & Canning, 2000; Bloom & Canning, 2000). Since the emergence of the current COVID-19 epidemic, global stock markets have encountered trillion dollar losses (The Telegraph, 2020). This is because stock markets and economic activities are fraught with diverse risks such as the notable 2008 financial crisis that brought global stock markets and financial markets melting (Dang & Nguyen, 2020). The risk of unexpected events such as disease epidemics in the like of current COVID-19 unleashes devastation to stock markets (Noy & Shields, 2019). Hence stock market analysts forecast that the current COVID-19 might present the greatest impediment to global stock markets since after the 2008 global financial crisis if solutions to halt the epidemic is delayed (Srivastava, 2020). Accordingly, economic analyst posit that the COVID-19 has the capacity to shrink global economic growth by half if solution is not found urgently to contain the spread (Financial Times, 2020).

The COVID-19 spread has thus made the OECD to change its 2020 global economic growth forecast outlook from 2.9 percent growth to 2.4 per cent, but highlights that if the coronavirus spread is intensified, the global growth could plummet to 1.5 per cent in 2020 (OECD, 2020). The novel COVID-19 has resulted to various restrictions in China and other countries of the world regarding people's travels, movement of goods and services, closure of factories with attendant reduction in production and plummeting of demand with the stay-indoors orders. The COVID-19 movement restrictions reverberates to the rest of the world touching on tourism and business visits, marketing and supply chains, stocks and bonds and accelerating reduction in stock market confidence (OECD, 2020). Previous literatures have had various conclusions and/or postulates about the effect of pandemic disease on the stock market and general economy. Some researchers conclude that pandemic diseases may not necessarily be sweepingly catastrophic to the entire economy (Jonung & Roeger, 2006); others maintain that previous pandemics weakened regional stock markets such as in Asia (Chen et al, 2018). In another perspective of pandemic study on stock market, researchers opine that disease pandemic hampers stock market participants' judgement, which limits their effective participation in stock market trading (Dong and Heo, 2014). In order to contribute to previous research on past pandemic effect on the stock market; this paper looks at the early effect of COVID-19 on three regional markets of the world – China, European Union and the United States of America with data from their stock indexes namely the Shanghai Stock Exchange Composite Index (China), the Euronext (EU), the Dow Jones Industrial Average and the S&P 500 (USA). No previous or current research has formed an amalgam of these important regions in a pandemic effect study on stock markets – hence, this paper's findings makes a novel contribution to knowledge.

This paper is organised as follows: the next section after this introduction explains the research problem; this is followed by a succinct statement of research objective. Thereafter, the theoretical inclination is presented followed by a review of related previous literature. Following the literature, the next section presents the research methodology and results; this s followed by the implication of findings and a statement of contribution to knowledge. The final section presents the conclusion and recommendation.

1.1. Problem Statement

The problem of this paper is centred on a somewhat surprising previous history of past stock market reaction to epidemics, wherein the stock market had shown some relative immunity to past epidemics (Kleintop, 2020). Hence, whether the stock market will still be immune to current coronavirus epidemic is a current stock market problem that baffles investors and policy makers; no research has dealt with this current problem of which an answer is urgently needed. However, stock market experts have forecasted that pandemics such as the corona virus may have adverse market consequences as these may increase stock market risk (Gormsen & Koijen, 2020; Hafiz et al, 2020). Such pandemics thus pose external shocks to the stock market, which derail ideal economic trends and therefore cause abrupt alterations to market sentiment (Wealth Advisor, 2020). The stock market and economic effect of coronavirus pose a bigger threat to the stock market more than the past epidemics such as the SARS virus of 2003, reason being that China has grown economically stronger than it was during the past 17 years, and has now occupied an important part of global economy (MSC, 2020). Unlike 17 years ago, China is now regarded as a global manufacturing hub, producing high-demand technology products such as the iPhone and a leading global consumer of copper and oil (Alameer et al. 2019). Whilst China accounted for 4% of global GDP in 2003, it has now grown massively to an economic giant – accounting for 16% of global economy (Horowitz, 2020). There is therefore a cause for economic concern when such a global economic giant falls sick to a pandemic such as COVID-19.

Therefore, whilst the COVID-19 is still unfolding with sporadic effects on the stock markets, it becomes pertinent to use available stock market data to inform investors and policy makers about the stock market reaction to coronavirus so far and what policy and investment implications that this reactions may portend for investors, academics and economic policy makers. This paper contributes a novelty to current literature by being one of the first to present such an empirical analysis to guide global investors and policy makers on the stock and money market effect of current epidemic.

1.2. Objective of the Paper

Drawing from the foregoing problem statement, the objective of this paper is to examine the differential effect of coronavirus epidemic on select global stock markets (China, Europe and United States of America). Therefore this research compares the pre-COVID-19 stock values with the within-COVID-19 stock values to ascertain if a significant difference exists between the two. In order to achieve this objective, the paper conducts a statistical analysis to check how the stock market has differed before and within the coronavirus outbreak. It then uses the results from the analysis to provide investment advice to investors and policy makers.

2. Theoretical Framework: The Black Swan Theory

The Black Swan theory and its application to economics was developed by Talib (2001; 2007); in his books, Talib, traced his application of Black Swan to the olden day Australia, when it was unknown and unbelievable to the olden day people to see a black swan except the known white swans, which they knew. However, it surprised the bird experts in the then old world when a scientist discovered a black bird that looks exactly like the known swan (Talib, 2007). Hence, Talib applied the discovery of the then novel black swan to describe sudden unexpected events that affect the stock market and commercial activities negatively or positively. This theory therefore fits this paper given that the emergence of Coronavirus in China overwhelmed the entire global community given its unique nature, which has caused massive health and mortality rate and as well spiralled into global stock markets.

Reference to Black Swan Theory is used to refer to events that are highly unpredictable of which the attendant effects on stock markets, money markets and general economy is severe. Given the high level of unpredictability of Black Swan events, economic experts advocate for investment portfolio diversification to cushion the severe effect of Black Swan events. This is the reason why portfolio investment diversification has bourgeoned in the recent past decade because of the emergence of many unexpected events, which includes inter alia, the subprime crises of 2007, the global financial crisis of 2008 to 2009, the internet bubble burst, the European public debt crises (Bekiros, et al, 2017). Others include disease epidemics such as Severe Acute Respiratory Syndrome (SARS), the 2009 swine flu disease and the 2014 Ebola disease. The Brexit was also a somewhat unforeseen event that rattled the British stock market (Topliceanu & Sorcaru, 2019). The current COVID-19 came suddenly, bewildered and overwhelmed the world health experts to the extent that no medicine has been found for COVID-19 even after three months of its emergence with increasing rate of infection and deaths that has caused the World Health Organisation (WHO) to declare it a global pandemic. The concomitant effect of Coronavirus pandemic has spiralled into different swings in the global stock and money markets causing glittery amongst investors (Fitzgerald, 2020). The closure of national boarders and restrictions in movement has affected global supply chains, which has also caused the stock markets into unpredictable volatility spikes (Financial Times, 2020; The Telegraph, 2020).

3. Literature Review

Economic history, especially those that affect stock markets and in turn, the stock market reaction to such events are often cyclical in nature (Keating, 2001). Accordingly, the stock market historical performance has appeared in many research literature, which document the effect of influenza and/or different types of epidemics on stock market and general economic performance of stock markets and nations across the world. Several findings have emerged from previous studies which examined influence of past epidemics on the stock market; for instance some researchers found that severe acute respiratory syndrome (SARS) episode in 2003 debilitated the Taiwanese economy (Chen et al. 2007). Other researchers found that SARS weakened regional stock markets in the Asian region (Chen et al, 2018). Other researchers such as Nippani and Washer (2004) investigate the effect of SARS on many countries' stock markets by applying the Mann-Whitney non-parametric tests and found no effect except one or two countries. A recent research by Kim et al. (2020) explored the impact of disease pestilence episodes on the financial growth of the café business. The study applied nine events on four pandemic sickness episodes during 2004-2016. The event study technique and Mann-Whitney U test were utilized to evaluate the impact of three firm qualities (brand dependability, promoting impacts, and administration types) on firms' value. This investigation affirmed the negative impact of epidemic episodes on the café business, and recognized how all the three firm qualities serve as hazard relieving factors (Kim, Lee & Tang, 2020).

Another related investigation on the effect of flu epidemic on stock market analysis by Dong and Heo (2014) gives an immediate proof that constrained consideration brought about by exogenous interruption affects the stock market participants and general investors. In particular, they looked at the progressions of expert forecast conduct during flu pandemics when investigators are confronting limitations caused by interruption of encountering influenza side effects by their relatives, family members, associates, and themselves. Dong and Heo (2014) finds that higher influenza force in the New York and New Jersey district is related with lower level of difference on stock value gauges among stock forecast experts. All the more strangely, experts are bound to over-anticipate target-cost for high-performing stocks and under-foresee target-cost for low-performing stocks. Dong and Heo (2014) confirm this outcome by utilizing an elective proportion of exogenous interruption that restrains stock analyst contemplation: immunization reaction frequency, and we find steady proof supporting the speculation that the restricted consideration or exertion designated to their work influences stock analyst conjecture conduct; subsequently, their capacity to go about as a significant source of data disclosure is diminished (Dong & Heo, 2014).

Another study by Chen, Jang and Kim (2007) examine the effect of SARS epidemic on Taiwanese hotel industry stock market performance. They highlighted that the travel industry endured the most, and encountered the most elevated stock value decrease (roughly 29 percent) inside a month of the SARS flare-up. Hence their study analyzed the impact of the SARS plague on Taiwanese hotel stock value developments utilizing an event-study approach. Seven of the hotels quoted in the stock exchange experienced sharp decreases in income and stock price during the SARS episode period. On and after the day of the SARS episode, Taiwanese hotel industry stocks demonstrated essentially negative total mean irregular returns, showing a critical effect of the SARS flare-up on inn stock execution. Observational discoveries could be utilized to get ready organizations for the comparable plagues, for example, a dangerous fowl influenza pandemic.

Some researchers Chen et al (2018) examined the effect of severe acute respiratory syndrome (SARS) pandemic on the link between China and other four Asian stock exchange markets. They applied two main analytical methods namely the time varying cointegration model and the difference-indifference method to investigate if SARS pandemic affect the long-run relationship between China's stock market and other four stock markets in Asia five years before and after the SARS pandemic. They found that indeed, the SARS epidemic affect the stock price in these markets and that it reduced the relationship between four Asian markets and the Chinese stock market. They concluded that disease epidemics can affect the financial integration or linkages between regional economic block of countries (Chen et al, 2018). Another related study had an unexpected findings; Nippani and Washer (2004) evaluated the effect of SARS on Canadian stock exchange markets and eight Asian stock exchanges. The study used the leading stock indices with the S&P 1200 global stock index for the sampled countries within the SARS epidemic period and within the non-SARS period. The t-test statistics and the Mann-Whitney test were used. They found that SARS epidemic did not inflict negative effect on the countries' stock exchanges except China and Vietnam.

Other researchers have looked at the impact of Ebola disease on the investors 'decisions in the African equity mutual fund (Del Giudice et al, 2018). They analysed 78 mutual funds in African nations and watched month to month mutual fund flows and performance for the time of 2006–2015. They find that two significant occasions namely Ebola and the Arab Spring, essentially influenced the flow of mutual funds. Retail financial specialists over-responded to these significant occasions, pulling back their investments from the African mutual funds. This outcome is especially

solid when associated with the media inclusion of these occasions: the higher the quantity of articles about Ebola, the higher the withdrawals by investors in mutual funds (Del Giudice et al, 2018). Another related research on Ebola epidemic and stock market performance examined the extent to which media information on Ebola epidemic had an impact on stock prices in the U.S.A. They find that Ebola media coverage more pronouncedly affect the stocks of West African Community regions – the epicentre of the Ebola disease; it also affected the U.S stock markets (though lightly). This provided a clue that the closer the media coverage to the centre of disease occurrence and to stock markets the more likely the media coverage on the disease will affect the stock market.

4. Methodology

Since the objective of this paper is to examine the differential effect of coronavirus epidemic on select global stock markets (China, Europe and United States of America). Data on historical stock value index for these three regions were collected for fifty (50) days before the COVID-19 outbreak and fifty (50) days within the COVID-19 pandemic. Hence, this data arrangement provided a paired equal sample of data, which was used in the paired sample t-test of difference in means. The stock indexes used were the Dow Jones Industrial Average Market Index and the Standard and Pore (S&P) (for the United States of America); the Shanghai Composite Index (for China) and the Euronex (for the European Union). The usage of t-test of difference in means is widely used in previous research that have sought to evaluate the effect of sudden events on stock market performance; these includes inter alia (Guo, Kuai & Liu, 2020; Kim and Tang, 2020; Funck & Gutierrez, 2018; Ahmed; Cheung, Fung & Tsai, 2010). The t-test for paired is generated denoted by the formula:

$$t = \frac{\bar{x}_1 - \bar{x}_2}{s}/\sqrt{n}$$

Where: \bar{x}_1 = mean of first sample; \bar{x}_2 = mean of second sample; s = standard error and \sqrt{n} = square root of the sample size.

Therefore the paired t-test for significance difference in sample mean of the four stock indexes are presented in Table 1 – Table 4. The test is conducted at an alpha (α) level of 0.05(5%).

4.1. Results

The statistical results, which show the extent of significance in difference between the paired samples of stock values for the four regional stock indexes are shown in Table 1 – Table 4. Since the COVID-19 pandemic started in China, the analysis began with the Shanghai Composite Index in Table 1 to check if a significance difference exists between the pre-COVID-19 Shanghai Composite Stock Index and the within-COVID-19 stock index. Against the research expectation, Table 1 shows that the mean stock index values in the Shanghai Composite index during the COVID-19 is 2988, which higher than the mean stock index value of the pre-COVID-19 Shanghai stock index at mean of 2943. The mean difference is found to be significant at a p-value of 0.0007 at one tail and p-value of 0.0015 at two tail tests. This therefore suggests that within the first fifty days of COVID-19 pandemic, the Shanghai Composite Index showed some resilience as it was able to withstand the sudden shock that enveloped the entire global stock market.

Table 2 and Table 3 present an analysis of two United States stock indexes namely the Dow Jones Industrial Average and the Standard and Pore (S&P) respectively. The t-test result in Table 2 show that a significant difference exists between the Pre-COVID-19 Dow Jones stock index and within-COVID-19 Dow Jones stock index with the Pre-COVID-19 Dow Jones stock index showing a significant higher mean stock index than the within-index values. Resulting P-values are significant at 0.0001 (for one tail test) and at 0.0002 (for two tail test). This indicates that the Dow Jones Industrial Average is sensitive to the COVID-19 pandemic with a reduction in the mean value of its stock index during the COVID-19 pandemic period lower than the pre-COVID-19 pandemic period. Furthermore, the Standard and Pore analysis is presented in Table 3; Although the p-values for both the one tail and two tail tests are higher than the alpha level of 0.05 (a sign of non-significant difference between the two sets), however, a closer observation at the mean stock market index for Pre-COVID-19 pandemic and the within- COVID-19 pandemic in Table 3 show that the Pre-COVID-19 S&P index value is higher that the within-COVID stock index value. Although, this difference is not statistically significance, but the implication is that the COVID-19 pandemic has caused a reduction in the S&P stock value. This combined with the Dow Jones Industrial Average analysis points the negative effect of COVID-19 pandemic on the United States stock market.

Within the European Union, stock index data from the Euronext 100 was used to analyse the stock market reaction to COVID-19 (Table 4). The statistical result from Table 4 shows that European Stock Index represented by Euronext 100 had a mean stock index of 1124 before the emergence of COVID-19 pandemic; this value decreased to 1107 within the sample of fifty days COVID-19 pandemic. However, this did not prove to be statistically significant in Table 4; this finding is analogous to the earlier forecast research, which opined that potential future pandemic in

Europe may not necessary be catastrophic to the entire economy (Jonung & Roeger, 2006). Although the difference in means stock index value is not significant given the high p-values (0.14 and 0.28 for one tail and two tail test respectively) in Table 4; however, it is important to note that the within-COVID-19 stock index values for Euronext is lower than the pre-COVID-19 values. This shows that on the average, the COVID-19 pandemic has had a reduction effect on the Euronext 100 stock index. Another point to note from the analysis in Table 1 – Table 4 is that the variances for the four indexes were higher during the fifty days into the COVID-19 pandemic; this suggests higher level of stock value fluctuations during the COVID-19 pandemic period than before; this is a vital point to note by stock market speculators.

From the foregoing results, it can be seen that only the Chinese Composite Index showed resilience to the COVID-19 pandemic. This finding provides an empirical corroboration to Ping (2020) who pronounced that Chinese markets are showing some degree of resiliency when compared to the weakening value position of other global stock markets. This outstanding robust characteristic of Chinese market during a debilitating event of COVID-19 is a sign that Chinese market is a viable investment destination. This has also been confirmed with a recent Chinese stock market analysis conducted by Forbes (2020), wherein Forbes market report as of March 6 2020 found that Chinese equity market defies the COVID-19 and is recording a rise in value with Shanghai Composite Index pitching high at value gain of +5.35%, adding that this was boosted by foreign investment who also defied COVID-19 to buy up to \$806m stocks in mainland China. Forbes (2020) add that Shanghai's stock gains is almost exceeding the pre-covid-19 recorded stock highs. This is a pointer to international investors that China provides a safe stock investment and speculation destination even in times of disease pandemic.

Table 1. t-Test: Paired Two Sample for Means: SSE Shanghai Stock Exchange Before and within COVID

t-Test: Paired Two Sample for Means				
SSE Composite Index Before and Within the COVID				
	Before	Within		
Mean	2943.9336	2988.5486		
Variance	2202.40919	7892.7605		
Observations	50	50		
Hypothesized Mean Difference	0			
df	49			
t Stat	-3.34628427			
P(T<=t) one-tail	0.00078945			
t Critical one-tail	1.67655089			
P(T<=t) two-tail	0.00157889			
t Critical two-tail	2.00957524			

Table 2. t-Test: Paired Two Sample for Means: Dow Jones Industrial Average (Before and Within COVID)

t-Test: Paired Two Sample for Mean	ns			
Dow Jones Industrial Average (Before and Within COVID)				
	Before COVID	Within COVID		
Mean	53.2616	46.063		
Variance	4.671083102	53.71719286		
Observations	50	50		
Hypothesized Mean Difference	0			
df	49			
t Stat	5.983654137			
P(T<=t) one-tail	0.000001			
t Critical one-tail	1.676550893			
P(T<=t) two-tail	0.000002			
t Critical two-tail	2.009575237			

Table 3 t-Test: Paired Two Sample for Means: S&P 500 (Before and Within COVID)

t-Test: Paired Two Sample for Means				
Stand & Poor (S&P) 500 Before and Within COVID				
	Before	After		
Mean	495.1436	485.7878		
Variance	146.0123	2019.099		
Observations	50	50		
Hypothesized Mean Difference	0			
df	49			
t Stat	1.226797			
P(T<=t) one-tail	0.11288			
t Critical one-tail	1.676551			
P(T<=t) two-tail	0.225761			
t Critical two-tail	2.009575			

 Table 4. t-Test: Paired Two Sample for Means: Euronext 100 (Before and Within

COVID)				
t-Test: Paired Two Sample for Means				
Euronext 100 Before and Within COVID				
	Before	Within		
Mean	1124.0462	1107.4984		
Variance	301.139824	9330.511393		
Observations	50	50		
Hypothesized Mean Difference	0			
df	49			
t Stat	1.073283804			
P(T<=t) one-tail	0.144200569			
t Critical one-tail	1.676550893			
P(T<=t) two-tail	0.288401139			
t Critical two-tail	2.009575237			

4.2. Implication of Findings for Academia and Practice

This research has important implication for the academia and stock market practitioners. The findings of this new research will assist stock exchange policy makers and investors in stock markets in structuring successful methodologies to balance financial related investments during eccentric occasions such as during this period of COVID-19 pandemic. The foregoing results are helpful for helping policy makers to establish appropriate policy responses along the trajectory of current COVID-19 or during future pandemics of similar nature. With regards to practice, this research offers investors that specialise in stock hedging and speculation with further information regarding how to navigate and make the best profit even during periods of epidemics. This empirical finding is helpful to position stock market related businesses to better understand and withstand related epidemics that may arise in the future. The findings from this research provides practical demonstrates to stock market participants that China offers a safer investment destination during this period of COVID-19 epidemic (at least within the early days and/or months into the COVID-19). Furthermore, this research and its findings provide a recent teaching case material on epidemics versus stock market relationship for academics and their students.

4.3. Value (Contribution of Paper)

This research adds to the existing body of knowledge on the impact of pandemic disease on the stock markets. The COVID-19 pandemic is still new and ongoing; no previous research has yet related this new disease epidemic with the stock and money market; therefore this research contributes the very first research findings on this unique area of how the current COVID-19 pandemic is affecting the stock and money markets. Accordingly, this paper provides an avenue for further research to explore the results and methods contained herein in further research to evaluate the effect of COVID-19 pandemic on other stock markets around the world. Accordingly, the original value and contribution of this paper is implicit on the fact that it is the first to apply differential analysis to derive the differential effect of COVID-19 pandemic on the stock markets of three global regions namely China, the EU and the USA; hence, and the first empirical research, which provides direction to investors toward a safer and profitable stock investment destination during this time of COVID-19 pandemic. Hence, this research contributed a new knowledge to the literature.

5. Conclusion

This paper set out with a core objective of analysing the differential effect of coronavirus epidemic on select global stock markets (China, Europe and United States of America). This is with a view to ascertaining the effect which the COVID-19 has had on the selected stock indexes of these regions namely the Shanghai Composite Stock Index (for China); the Euronext 100 (for EU); the Dow Jones Industrial Average and S&P 500 (for the United States). Stock market index data on these four stock indexes were collected for fifty days before and within COVID-19 pandemic. Applying the t-test of difference in mean stock values, findings from the analysis indicate a significant effect of COVID-19 pandemic on two stock indexes the Shanghai Composite Index and the Dow Jones Industrial Average. The Shanghai Composite Index showed resilience to COVID-19 pandemic with a significant gain in stock values during the first fifty days into the pandemic; on the contrary, the Dow Jones Industrial Average experience adverse impact from the COVID-19 pandemic with a significant loss of stock market value on its index during the first fifty days into the COVID-19 pandemic. Although the difference in stock values during the COVID-19 pandemic for Euronext 100 and the S&P 500 were not statistically significant, but their mean stock index values show a reduction in value during the sample period first fifty days within COVID-19 pandemic. Furthermore, all the four

stock market indexes experienced a higher degree of stock value variability (or fluctuation) during the first fifty days within the COVID-19 pandemic. The findings from this research provides practical demonstrates to stock market participants that China provides a safer investment destination during this period of COVID-19 epidemic (at least within the early days and/or months into the COVID-19). Furthermore, this research and its findings provide a recent academic teaching case material on epidemics versus stock market relationship for academics and their students for use in institutions of higher learning and business schools. This paper makes a novel contribution to knowledge as this is the first empirical research on the effect of COVID-19 pandemic on stock markets, which provides direction to investors toward a safer and profitable stock investment destination during this time of COVID-19 pandemic. Therefore, this paper provides an avenue for further research to explore the results and methods contained herein in further research to evaluate the effect of COVID-19 pandemic on other stock markets around the world. This paper also suggests further future research to determine the factors that instil resilience to Chinese stock market.

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