

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the study

Since the end of 2019, a sickness known as coronavirus disease (COVID-19) has been spreading over the world. In December 2019, the first COVID-19 case was reported in Wuhan, China's capital. On January 3, 2020, the Wuhan Health Committee reported 44 instances of viral pneumonia with no known cause. Due to mass travel around the Chinese New Year and Wuhan's geographic location as an important transportation hub in China, the disease has silently spread to other regions in China since early January 2020. On the 19th of January, the first three confirmed cases outside of Wuhan were disclosed, one in Guangdong and two in Beijing. Since 10 a.m. on January 23, all bus, metro, ferry, and long-distance passenger services have been suspended. Services have been suspended. The city of Wuhan's public transit system had been shut down. As a precaution, all outbound trains and flights were also halted. The Chinese government continues to undertake various public health policies, such as travel restrictions, curfews, and school closures, in order to limit the spread of the disease. On January 30, 2020, the World Health Organization (WHO) issued its first global alert about COVID-19 (World Health Organization, 2020a). On March 11, 2020, the WHO labeled the outbreak a pandemic as the number of confirmed cases climbed around the world (World Health Organization, 2020b). The countries with the most confirmed cases so far are the People's Republic of China, Italy, South Korea, and the United States.

The stock market is a well-regulated market that was intended to aid in the growth and development of a country's economy, as well as to act as a meeting point for highly liquid and insolvent (potential) investors. According to popular opinion, the stock market thrives on information. The stock market, as structured as it is, is not immune to or protected from the arrival of information from many sources (see Sun & He, 2012; Gerding, 2005; Kowalewski & Śpiewanowski, 2020), as it is capable of defining or redefining its values consistent with efficient market hypothesis. Disasters, sports, news, environmental issues, political changes, and epidemic outbreaks, for example, are recognized as major events that affect stock market returns (Al-Awadhi, Al-Saifi, Al-Awadhi, and Alhamadi, 2020). Business governance and accounting data are two further issues to consider (Alade, 2018). To summarize, the stock market depends on heterogeneous information (whether endogenous or exogenous in nature) that can influence market participants' and stakeholders' judgments about market operations. COVID-19, commonly known as Coronavirus, appears to have had a negative impact on global stock markets (Lopatta, Alexander, Gastone, & Tammen, 2020; Barro, Ursa, & Weng, 2020).

Apart from the immediate impact during the early phases of the pandemic, the influence on Nigerian stock market performance in the medium and long term remains foggy. According to Alfaro, Chari, Greenland, and Schott (2020), if the pandemic turns out to be less dangerous than

expected, the stock market is likely to rebound as the number of confirmed cases continues to climb. The idiosyncratic nature of the extraordinary new Coronavirus outbreak and its implications on the global economy and stock markets are undeniably distinct from prior economic crises (Ding, Levine, Lin & Xie, 2020; Tashanova, Sekerbay, Chen, Luo, Zhao & Zhang, 2020). The AIDS epidemic, according to Davis and Anderson (2008), is the worst public health disaster in modern history, with ramifications ranging from the deeply personal to national security and economic development issues. The rapid development of COVID-19 in Wuhan, China in December 2019, which was declared a pandemic and a Public Health Emergency of International Concern (PHEIC) by the World Health Organization on March 11, 2020, has created history. The pandemic is marked by rapid transmission, yet it is less lethal than other viruses. The first COVID-19-related death was documented on January 11, 2020, and the count is still going. According to WHO figures, as of May 31, 2020, roughly 5,934,936 and 100,610 cases had been confirmed globally and in Africa, respectively, with 367,166 and 2,554 deaths. Past projections about the expected total number of COVID-19 cases and fatalities have been tainted by reality, implying an unpredictable surge in the coming days. It is unavoidable that a PHEIC will have an impact on global and/or regional stock markets. However, the intensity of this outbreak may differ from that of previous outbreaks. Swine flu in 2009, polio in 2014, the 2014 Ebola outbreak, the Zika virus epidemic, and the current COVID-19, among other epidemics and pandemics, have all been labeled PHEIC in the last decade. HIV/AIDS was labeled a pandemic in previous decades (Davis & Anderson, 2008).

The study will look at the financial markets, the reaction to the covid-19 pandemic using daily confirmed cases, recovered cases, and deaths, as well as the performance of the Nigerian stock exchange since January. In covid-19 verified cases, this investigation will determine whether the market reacted unfavorably or favorably to the growth. This refers to whether stock markets fell or rose as the number of confirmed cases grew. Apparently the outbreak of coronavirus has had it roll on global stock markets (Lopatta, Alexander, Gastone& Tammen 2020; Bareo, Ursua &Weng 2020) among all other spheres of life. But the link between covid-19 confirmed cases (within an economy, a religion and globally) and the Nigerian stock market return call for empirical investigation and confirmation if it has a short run or long run impact on stock market performance in Nigeria.

## **1.2 Statement of Problem**

Without meaningful and trustworthy economic stability, it is not an exaggeration to claim that the Nigerian Stock Exchange will not function well. Because the capital market is the engine of economic growth, a deficit in the Nigerian economy will have an impact on the Nigerian stock exchange. As a result, determining whether the returns of stocks listed on the Nigerian Stock Exchange will be affected is vital not only to investors but also to Nigeria's economic growth. The goal of any stock market is to maximize the market's returns. Because the globe has yet to recover from Covid-19, we want to observe how it affects the stock market. Over 2 million people have died as a result of it, and it has affected every country on the earth. Nigeria was not

immune to the virus. In Nigeria, nearly 200,000 persons were impacted, with both total recovery and total death. As a result, the economy was brought to a halt. Everything was shut down, including the economy, companies listed on the Nigerian stock market trading floor, and brokers and dealers who worked from home. The purpose of this research is to evaluate how the Covid-19 has affected stock market performance and how companies listed on the Nigerian stock exchange have been affected.

### **1.3 Research Objectives**

The general objective of this study is to ascertain the relationship between covid-19 and equity performance in Nigeria. The specific objectives are:

- i. To evaluate the effect of cumulative reported cases of covid-19 on the stock market performance in Nigeria.
- ii. To examine the effect of total recovered cases of covid-19 on the stock market performance in Nigeria
- iii. To appraise the effect of covid-19 death related cases on the equity performance in Nigeria.

### **1.4 Research Questions**

The following research questions will be answered in this study

- i. what is the relationship between the total cases of reported covid-19 and the stock market performance in Nigeria?
- ii. what is the relationship between the total recovery cases of covid-19 and the stock market performance in Nigeria?
- iii. what is the relationship between the total death cases of covid-19 and the stock market performance in Nigeria?

### **1.5 Research hypothesis**

The following hypothesis stated in the null form will be tested in this study

- H<sub>01</sub>: There is no significant relationship between total recovered reported covid-19 affected cases on the stock market performance in Nigeria.
- H<sub>02</sub>: There is no significant relationship between recovered covid-19 cases and the stock market performance in Nigeria.
- H<sub>03</sub>: There is no significant relationship between covid-19 death and the stock market performance in Nigeria.

## **1.6 Significance of the study**

This study will help investors and operators in the stock market NGX as well as the regulators to formulate policies and rules that will continue to enhance the exchange to operate an efficient market that is free from any shock from the covid-19. The government will also be informed on the importance of covid-19 eradication programmes and the need to increase such intervention. The health practitioners will also be put in better stead on the importance of their efforts as the first line responder to this pandemic. The international partners will also appreciate the need for consolidation of efforts to globally for the containment of this global epidemic.

## **1.7 Scope of the study**

The study will cover the daily period from 16<sup>th</sup> of March, 2020 and 7<sup>th</sup> of April, 2021. The study is on Nigeria stock market performance relationship with covid-19 measurements.

## **1.8 Operational Terms**

**Stock Market:** This is a place where individual and institutional investors come together to buy and sell shares in a public venue.

**Nigerian Exchange Group Plc:** This is a sophisticated organization equipped with inherent mechanisms for mobilizing, harnessing, and making accessible long-term capital from the surplus sectors of the economy to the deficit sectors of the economy. It formerly called Nigerian Stock Exchange before demutualization.

**Stock/Share:** This represent ownership portion in the firm, which give shareholders voting rights as well as a residual claim on corporate earnings in the form of capital gains and dividends.

**Coronavirus 2019:** COVID-19 is a disease caused by a new strain of coronavirus. 'CO' stands for corona, 'VI' for virus, and 'D' for disease, 19 stands for the year of its unset.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **Preamble**

This chapter reviews the existing literature in the area of the study. This review is classified under conceptual, theoretical and empirical reviews.

#### **2.1 CONCEPTUAL REVIEW**

##### **2.1.1 CONCEPT OF NIGERIA STOCK EXCHANGE (NIGERIAN EXCHANGE GROUP)**

The NGX (formerly NSE) allows governments and businesses to raise long-term capital to undertake development projects as well as expand and modernize their operations. This indicates that the NGX is a market for trading various types of long-term securities. The National Stock Exchange (NSE) offers the necessary facilities, rules, and processes to enable healthy market competition and growth. As a result, the NSE acts as a middleman between fund providers and long-term fund investors. The NSE's allocating role is crucial in influencing the economy's overall growth. According to Alile (1996) the economy's rate of expansion will surely decline if capital resources are not directed to those economic sectors, notably industries with expanding demands and the ability to boost productivity.. As a result, the stock market plays a crucial and indispensable role in the Nigerian capital market, earning it the described as the "the hallmark of the Nigerian capital market."

##### **2.1.2 Corona Virus 2019 (Covid-19)**

The first reported instance of the virus, according to Shereen et al (2020), occurred in December 2019 in Wuhan, the capital of China's Hubei province. It began in the province as a type of pneumonic disease. The cases were reported to the WHO national office, and it was discovered that the virus was a new strain of the SARS-CoV virus from 2002. . The virus was given the name Covid-19 by the WHO on February 11th, 2020. Coronavirus Disease of 2019 is an abbreviation that stands for Coronavirus Disease of 2019. The disease's symptoms were similar to the symptoms of a regular cold. Fever, cough, shortness of breath, and loss of smell are among them. However, the repercussions are more serious than the symptoms, since it can lead to pneumonia, viral sepsis, ARDS, kidney failure, and other issues. According to the individual's health situation, the complications are considered to worsen over time. The virus is not transmitted by the air, but it can be distributed in a variety of ways. It is disseminated mostly through intimate contact between people. If droplets from infected persons fall on surfaces, people could get infected by touching an already contaminated surface. The virus's half-life outside the human body is temperature and humidity dependant, according to several studies, therefore different places can have varying rates of transmission (Cortegiani, 2020; Luo,2020).

The best method of control is to keep safe distance from infected persons, constant washing of the hands and cleaning of possibly contaminated surfaces. The symptoms are irregular, so it is difficult to clearly identify an infected person without testing. The spread has been aided by the presence of these silent carriers. There are three types of silent carriers, each with its own set of characteristics (Lauer, 2020). They are:

1. Asymptomatic: people who carry the active virus in their body but never develop symptoms;
2. Pre-symptomatic: people who have been infected and are incubating the virus but don't yet show symptoms;
3. Very mildly symptomatic: people who feel a little unwell from a Covid-19 infection but continue to come in close contact with others.

Because the infectious potential of these silent carriers is unknown, social isolation has been extensively urged. The epidemic and its impacts are seen in every country, prompting the development of local solutions to handle the situation while a vaccine is developed. The goal of this study is to estimate the probable spread of COVID-19 by analyzing the evolution and response of Nigeria to the virus in her territory. In Nigeria, the Federal Government, with the help of many ministries and government organizations, mounted a robust reaction against COVID-19. The Federal Ministry of Health is on the front lines; the ministry is responsible for the creation and implementation of COVID-19 policies in Nigeria, in partnership with other ministries and agencies. Inspections of public and private treatment institutes for COVID-19 confirmed patients are carried out by the Federal Ministry of Health's Accreditation Committee.

In addition, the ministry oversees the development of training guidelines and the provision of personal protective equipment (PPE) for frontline personnel dealing with this unique disease. The Presidential Task Force for COVID-19 Control (PTF) and the Nigeria Centre for Disease and Control (NCDC) are both supportive of the ministry (NCDC). President Buhari established a 12-member task committee to lead the fight against COVID-19 in Nigeria. Mr. Boss Mustapha, the Secretary to the Federal Government, chairs the Task Force, and Dr. Sani Aliyu is the group's National Coordinator (Ameh, 2020). The task force's goal is to come up with a practical National Response Plan that can be updated on a daily basis as needs evolve. The approach must adhere to worldwide best practices while also taking into account the country's unique conditions. Because testing has proven to be the most effective technique in applying containment measures, expanding testing capacity would be beneficial to enhance containment. In addition, PTF and the Ministry of Health have done an excellent job with frontline worker training and PPE distribution, although their reach appears to be limited due to a lack of funding. The NCDC has been educating Nigerians on preventive measures in partnership with major communications firms. They've also maintained a regular presence on social media to keep citizens informed about the virus's spread around the country. Nigeria announced 6,936 new confirmed COVID-19 cases in March 2021, the biggest monthly drop since the outbreak began.

### **2.1.3 Total Reported Cases of Covid-19**

On February 27, 2020, the first case of COVID-19 was confirmed at the Infectious Disease Centre in Yaba, Lagos State, Nigeria. Aboard the 24th of February, 2020, an Italian citizen arrived at the Murtala Muhammed International Airport in Lagos at 10:00 p.m. on a Turkish airline from Milan, Italy. The next day, he went to his company's site in Ogun State, where he presented himself at the company's staff clinic. The on-duty physician had a strong hunch that the virus was there. This prompted him to refer the Italian citizen to the Infectious Disease Hospital (IDH), where the COVID-19 status was confirmed (Nigeria Centre for Disease Control, 2020). The Nigerian Centre for Disease Control (NCDC) began tracing 'Persons of Interest,' which included all passengers on the airplane that brought the index case to Nigeria, as well as anyone who had intimate contact with the index case while in Lagos and Ogun State. After a two-week period, a cluster of cases was discovered in Lagos and Abuja, signaling the start of the virus's nationwide spread. The Nigerian Civil Aviation Authority (NCAA) has imposed restrictions on international commercial flights into the country, effective March 23, 2020. (2020, Onyeji) On the same day, Nigeria recorded its first fatality: a 67-year-old male returnee from the United Kingdom who had previously been treated for underlying medical conditions. The death took place in Abuja, the Federal Capital Territory (Nigeria Centre for Disease and Control, 2020). Only persons who have been tested can be easily identified as infected due to the nature of the symptoms. COVID-19 has been confirmed in an increasing number of persons, according to test results. Because of the ease of transmission and the high amount of interaction among the general public, confirmed cases make up a small percentage of the total number of cases. The rate of newly confirmed cases per day demonstrates this.

### **2.1.4 Recovery of Covid-19**

Covid-19 pandemic is not a death sentence especially when those who have been infected quickly have access to care. Most recovery cases that were recorded are those who were admitted, but later discharged after being treated and then recovered from the attack. On a daily basis, patients are being discharged after recovery from the attack. The records are kept on those who are admitted but later discharged. The daily records are often displayed on the television or are available at the National Center for Disease Control (NCDC). After discharged, the patients are advised to keep the covid-19 protocol. Those whose case are not severe are often discharged about three to a week after admission, while those who have underline ailment often take longer time.

### **2.1.5 Death of Covid-19**

Having being admitted for some time in the intensive care centers, death from death started coming out after the first two weeks of its unset. Most of the deaths occurred in Lagos state and Abuja which are COVID-19 hotspots. Most of these deaths are largely among those who have underline health challenges among the elderly.

### **2.1.6 Lockdown**

On March 29, 2020, the Federal Government responded by authorizing the shutdown of all non-essential services (companies and industries) and restricting people's movement in Lagos, Ogun, and the Federal Capital Territory, Abuja. The majority of state governments imposed limitations on public gatherings and inter-state travel. On the 4th of May, 2020, the Federal Government allowed the progressive lessening of lockdown in the formerly restricted states. As a result of the virus's widespread spread, Nigeria's federal government has taken steps to contain it. The virus's accessible knowledge and the wellbeing of her citizens served as guiding beacons in enforcing periodic limits in order to maximize containment. Prior to the extension of containment restrictions to non-essential services, educational and religious institutions were the first to be curtailed (Onyeji, 2020). The effectiveness of the lockdown in Abuja, Lagos, and Ogun State was questioned, since citizens in all three states appeared to be reluctant to comply with the restrictions (Usigbe, 2020). The inter-state mobility ban has supposedly been overturned due to our society's corruption. Members of society have considered the promise of palliatives (cash transfers and relief supplies distribution) as a big failure, given that Nigeria is the epicenter of the world's multidimensional poverty (Okon, 2020). As a result, crime rates in some sections of Lagos and Ogun States have risen (Orjinmo & Ulohutse, 2020). Other states of the Federation did not strictly adhere to the principle of social separation, and other governments did not restrict religious gatherings.

## **2.2 Theoretical Review**

The following theories were reviewed in the course of this study.

### **2.2.1 Market Efficient Hypothesis Theory**

The efficient market hypothesis (EMH), often known as the efficient market theory, claims that stock prices reflect all available information and that consistent generation is impossible. If stock prices properly and quickly reflect all relevant information, a market is efficient. Information encompasses not just financial statistics, but also political news, social and economic events, and other data that has an impact on stock prices. According to Fama [1970], an efficient market is one that reflects all available information. A well-functioning market reacts quickly to reach a new equilibrium price that fully represents the available information. An efficient market has three layers based on information absorption:

- Efficient in weak form: The market is deemed to be in weak form if the stock price fully represents all information due to price, volume of sales, and prior profit. Stock prices from the past cannot be used to predict future stock values.
- In its semi-strong form: A semi-strong efficient market is one in which the market price reflects all publicly available information. Information includes past prices, firm fundamental data, profit forecasts, and accounting techniques. The market price will reflect public information if an investor receives it.



- Efficient in strong form: If the price fully reflects all information, including historical data, public information, and private knowledge, the market is said to be in robust condition.

Stocks always trade at their fair value on exchanges, according to the EMH, making it impossible for investors to buy cheap stocks or sell for inflated prices. As a result, professional stock selection should be difficult to outperform the broader market, and the only method for an investor to earn larger returns is to choose riskier stocks.

### **2.2.2 Asymmetric Information Theory**

In the stock market, information is a major driver of stock returns and volatility. In the form of cross-sectional and time series, this data might be idiosyncratic and macroeconomic. In most cases, information is released on a scheduled (with advance warning of the date and time of release) or unforeseen basis (without notice). Linearly (symmetrically) or non-linearly, information enters the market (asymmetrically). The information could be both poor (negative) and excellent (positive) news, with significant consequences for stock return volatility. In this study, stock price response to information is employed as a metric to determine whether a stock market is symmetric or asymmetric. If equity prices respond to available information without mispricing, if investors have homogeneous expectations of the distribution of stock returns and volatility and are privileged to information at the same time, and if the market price of an equity is equal to its intrinsic value, and if investors have full knowledge of an equity's intrinsic value, then, the market is perfect or efficient or informational symmetric. When there are differences between the intrinsic and market values of financial instruments, and when investors' assumptions about the probability distribution of expected returns and hazards are heterogeneous, the market is informational asymmetric. It is a circumstance in which one party to a transaction is given exclusive access to information that the other side does not have as a means of profiting at the expense of the uninformed investors. Information asymmetry, according to Stiglitz (2003), is "the condition in which some information is known to some but not to all parties involved" in a transaction, causing the market to become inefficient. Prices and markets, according to Stiglitz and Walsh (2002), are the foundation of the economy's incentive structure. However, there are some information issues that markets do not, or do not well, handle. When information is complete, the market's capacity to do the jobs it does so well is occasionally hampered by incomplete information.

### **2.2.3 Behavioral Finance Theory**

In their wide literature study of the behavioral biases, Kumar and Goyal (2014) discovered the following four most common behavioral biases that affect investing decision-making: Overconfidence, home bias/familiarity bias, and the disposition are all examples of herding.

To begin, one of the most common investment biases is herding, which occurs when individuals irrationally follow the decisions of other investors without fully understanding why. There are

several reasons for this, some of which stem from research into group psychology, which shows that when a group makes a decision, the minority feels pressured and is more willing to change its mind even if an individual's own calculations differ from others, he or she will begin to believe that if so many other people agree on this answer, it must be correct) (Zamoth & Snizek, 1997). Other reasons could be coming from a poorly structured performance measurement of fund managers, when the fund manager's compensation is tied to the benchmark of other funds' performance (if he underperforms with others, he is not penalized, however if he pursues individualistic decision and happens to be wrong, his compensation would be negatively affected) (Cheng, Hong & Scheinkman, 2015).

Overconfidence is the second commonly recognized bias, which occurs when an investor is overconfident in his or her ability to make profitable investment. Given his previous success, the investor expects it to continue, believing in his uncanny ability to predict stock performance better than others, which leads him to overlook hazards and make irrational investment (Odean, 1999). Another prevalent behavioural bias is home bias/familiarity prejudice, which occurs when investors hold an excessive amount of domestic stocks compared to what rational investor would hold. Because the returns on the international diversification of the portfolio are higher than the returns on domestic diversification, it is commonly referred to as the equity home bias puzzle. Coval and Moskowitz (1999) investigate this bias in considerable depth.

#### **2.2.4 MORTALITY THEORY**

The tension that humans encounter between their impulse to avoid death fully and their intellectual knowing that postponing death is ultimately fruitless is explored in Mortality Theory. According to terror management theory, when people think about their mortality and vulnerability to death, they experience terror because they desire to avoid dying. Mortality salience arises as a result of humans devoting all of their actions to either avoiding or distracting themselves from thinking about death. As a result, according to terror management theory, practically all human action is motivated by the threat of death. Throughout most of history, human existence was marked by poor economic living conditions, high fecundity, and high mortality. The so-called economic and demographic transition began in the early nineteenth century, with a rapid increase in per capita incomes, an acceleration of technological change, a decline in gross and net fertility, which was sometimes preceded by an intermediate period of increased fertility, and an unprecedented drop in adult and child mortality rates. What are the underlying causes of economic and demographic underdevelopment, and what are the endogenous interactions between mortality, education, and fertility that lead to changes in these dimensions? Why are so many developing countries still living in deplorable conditions today? In this study, we suggest that in order to answer these concerns, it is critical to explicitly account for endogenous changes in longevity, technology, population education composition, and fertility disparities associated with human capital acquisition heterogeneity. After Galor and Weil's key contribution, the central significance of human capital in phase transition has been widely recognized (2000). Most following ideas and research have focused on models with

homogeneous agents and average human capital acquisition. Explaining the remarkable increase in average years of formal education that accompanied the shift is usually the focus. The observed changes in average human capital acquisition, on the other hand, are the result of significant changes in population composition. Historically, formal education and literacy were only available to a small percentage of the population. We characterize the economy's dynamic evolution analytically. Economic development, fertility, and education are all influenced by endogenous changes in mortality and technology, resulting in a persistent bi-directional feedback system. Initially, the feedback is nearly imperceptible, and the economy experiences a protracted period of virtually static growth, despite the fact that the technical frontier and the stock of knowledge continue to expand. Once the bidirectional feedback generates sufficient returns on skilled human capital to persuade a significant enough share of the population to invest, however, the transition occurs. The resulting development path shows an endogenous phase transition from a low per capita income environment with high fertility, high mortality, and few agents acquiring education and skills to a high per capita income environment with low fertility, low mortality, long life expectancies, and widespread education. This work relates to various contributions in the literature by providing an account of the factors and mechanisms behind the economic and demographic transition, as well as underdevelopment. Despite the expanding corpus of current information, explaining the dynamic interactions between the economic and demographic domains, as well as providing a cohesive theory that is consistent with the various stylized facts, has proven difficult.

### **2.3 Empirical Review**

Tashanova et al. (2020) attempted to analyze the state of investment dynamics during a pandemic with the goal of identifying elements that could affect stock prices. Alternative data from Google Trends was used to conduct industry sector analysis. The findings demonstrate that various industries profited from the ongoing pandemic, including online education, healthcare, and online entertainment, all of which might be continued in the future. In the same vein as Ding et al., (2020), the study primarily concentrated on finding wealthy enterprises during the epidemic without evaluating the implications on the market as a whole (2020). The fact that some businesses have fared well during the pandemic does not imply that stock markets are doing well.

The impact of listed firms' reporting habits during the ongoing pandemic on stock price responses and how capital markets evaluate risk was investigated by Lopatta et al. (2020). The study included an assessment of the impact of COVID-19 on the businesses of about 300 international firms (drawn from ten countries). The study discovered that corporations that include the COVID-19 crisis in their annual reports have lower beta values and higher abnormal returns than those that do not, implying that investors respect firms' ability to incorporate global crises into their reports, assuring transparency. The study's focus was solely on the investors, although the interests of other stakeholders also demand consideration and research.

In the backdrop of the devastating COVID-19 epidemic, Takahashi and Yamada (2020) attempted to discover predictors of Japanese stock returns during the first quarter of 2020. The structure of ownership, firm liquidity, exposure to two leading business associate nations, and scores for environment, social, and governance were all analyzed. Except for financial service firms, data from all firms listed on at least one Japanese stock exchange as of December 30, 2019 was used to run an Ordinary Least Square regression. The data demonstrate that enterprises in the Nikkei 225 index and firms that get foreign direct investment from China and the United States have opposite abnormal returns, while ESG firms have similar abnormal returns.

In a similar vein to Ding, Levine, Lin, and Xie (2020), which focused on share price reaction to the epidemic, the study was also more concerned with firm specific stock returns. Baig, Butt, Haroon, and Rizvi (2020) investigated the impact of COVID-19 on the US equity markets, focusing on liquidity and volatility dynamics. The findings suggest that the rising trend in verified COVID-19 cases and deaths is linked to a statistically significant increase in market low activity volume and unpredictability, which is exacerbated by lockdown and limitations. The study's orientation is unique in that it focuses on the core of the market's existence.

By investigating the influence of the external shock of the coronavirus pandemic on financial markets, as well as the imposed limits on non-transparent trading, Ibikunle and Rzayev (2020) investigate the effect of stock price volatility on unlit market share and traders' venue choice. A total of 110 European stocks were used as samples, with 55 being control and 55 being treated. The results of univariate and multivariate analysis reveal that market volatility caused by COVID-19 reduced the informational efficiency of stock prices when compared to equities subject to dark trading restrictions.

Unlike Ibikunle and Rzayev (2020), who focused on stock price volatility, Ding et al. (2020) analyzed reactions of stock prices from 56 nations to the shock of COVID-19 epidemic as it affects business qualities. Data was collected from nearly 6000 businesses. The shock on stock prices of firms with more non-financial institutional ownership performed better, whereas the shock on stock prices of firms with stronger cash, less debt, higher profits, reduced pandemic exposure as a result of customer and supply chain location, engage in higher CSR, and have low entrenched executives was very mild, but very bad for firms with higher hedge fund ownership. These data reveal the potential impact of the pandemic on company features, which could reshape stock market values, as AlAwadhi et al.(2020) noted.

Al-Awadhi et al. (2020) investigate the impact of the Coronavirus pandemic on Takahashi and Yamada stock market results in China (2020). Between January 10 and March 16, 2020, a panel data regression study was conducted utilizing daily confirmed COVID-19 cases and 1,579 stocks data from firms listed on the Hang Seng Index and Shanghai stock exchange composite Index. The findings demonstrate that confirmed active and mortality cases from the COVID-19 epidemic had a negative relationship with stock market returns. It means that the early stages of the COVID-19 epidemic resulted in a drop in the source economy's or territory's stock market

results. Shive (2010) looked at the impact of social influence on individual investor trading and stock returns on a daily basis in Finland. For a nine-year period between 1995 and 2003, data was collected from 20 of the most active stocks. Individual investor trading is predicted by a measure of the rate of disease transmission and rumour through social contact, according to the study. It also shows that social factors have a major impact on individual investor trading and that socially motivated trading can predict stock outcomes.

Alfaro et al. (2020) looked at daily changes in forecasts during the SARS and COVID-19 pandemics in Hong Kong and the United States, respectively. The study discovered that COVID-19 related market value reduces with capital intensity and leverage at the company level, and are greater in industries more favourable to disease transmission. Ozili and Arun (2020) investigated the impact of Covid-19 on the global economy and found that the virus had a significant negative influence on the Nigerian stock market, encouraging social isolation that resulted in the closure of financial markets, corporate offices, enterprises, and events. Because of the virus's rapid spread, investors, consumers, and trade partners may be concerned about their safety when it comes to consumption and investment.

The impact of COVID-19 on the Nigerian economy was researched by Akanni and Gabriel (2020), who discovered that the pandemic caused interruption of operations and economic instability, with the United Trade and Development Agency estimating the cost of the epidemic to be around \$2 trillion. It has been shown that factors such as social isolation, staying at home, spending restrictions, and supply issues such as decreasing or stopping production and output have a detrimental impact on economic growth. These factors have resulted in rising poverty and unemployment rates. According to the National Bureau of Statistics (NBS) report 2020, Nigeria is ranked 21 out of 181 countries with a high unemployment rate of 23.1 percent, with an estimated 87 million people living on less than \$2 a day.

According to Igwe (2020), the world economy is experiencing its worst-ever economic recession as a result of the COVID-19 epidemic. Igwe pointed out that the virus's shock can raise volatility, which can have a severe influence on a country's economic and financial system. According to Adesin (2020), the worldwide equitable market has lost roughly 24 billion dollars, with about 22 billion lost in US GDP. Ndedi (2020) looked into the effects of the Coronavirus in a few African countries. According to the study, countries like Nigeria and Angola would bear the brunt of the suffering because they rely heavily on crude oil to maintain a stable economy and manufacturers of goods and services, and food imports have been restricted. As a result of the steep reduction in commodity prices, African countries with strong economies such as Nigeria, South Africa, Angola, Egypt, and Algeria would face fiscal pressure.

Baig, Butt, Haroon and Rizvi (2020) examined the consequence of COVID-19 outbreak on the US equity markets with main attention on its liquidity and volatility dynamics. The results show that the upward trend in confirmed cases and deaths inflicted by COVID-19 is related to statistical significant rise in market low activity volume and unpredictability, a situation also

driven by lockdown and restrictions. The direction of the study is exceptional as it targets the core of the market existence. Olufemi and Bolanle (2018) investigated international portfolio diversification in the Nigerian stock market, concluding that there is no association between the Nigerian stock market and the five other developed countries using a vector autoregressive granger causality test. However, when using the Generalized Method of Moments regression, the result demonstrates that developed stock markets have an impact on the Nigeria stock market during crisis and pre-crisis periods. This led to the conclusion that, prior to the Covid-1 issue, the Nigeria stock market was safe for investors, but that the approaching pandemic that has shocked the global economy has made it difficult to invest.

The nexus between the COVID-19 epidemic and the Nigerian stock exchange market has not been examined, as evidenced by the available empirical studies listed above, whereas most studies conducted in other regions of the world focused on stock returns or industry specific characteristics. The lack of a statistically significant association between COVID-19 confirmed cases and the Nigerian stock market was based on the divergence of submissions from previous studies.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **Preamble**

All operations involved in gathering the critical data required for this project are referred to as methodology. The extent of the researcher's procedural tactics to be used in the research is addressed in this section.

#### **3.1 Research Design**

This study will employ ex post facto research design to depict the relationship between covid-19 (total confirmed cases, total recovered cases and total death) and the stock market performance in the Nigeria stock exchange. This design requires the assessment of the influence of past variables on the current occurrence or event. Agburu (2001) describes ex-post facto research design as an enquiry to determine whether, and to what degree the occurrence of the current event has been affected by a variable or event that occurred in the past. The ex-post-facto research design discusses the nature of two variables: independent and dependent variables. The independent variable exists in space and time before the dependent variable.

#### **3.2 Population of the study**

The population for the study will constitute all the listed companies on the stock exchange. It thus a census of all the company listed within the period of the study. For the covid-19 population, this will contain the record of total cases reported, total recovery cases and total deaths recorded by NCDC within the period of 16<sup>th</sup> March, 2020 and 7<sup>th</sup> April, 2021 (263 days)

#### **3.3 Method of data collection**

Secondary data collected from National Centre for Disease Control (NCDC) and Central Bank of Nigeria Statistical Bulletin (2020) were collected online from the website of the relevant agencies.

#### **3.4 Method of Data Analysis**

Multiple regression analysis will be used to analyze and determine the relationship that exists between the dependent and the independent variables. The statistical tool for the analysis is SPSS version 23.

### 3.5 Model Specification

Following the regression analysis specification, the functional presentation of the model is specified thus:

$$SMP = f(TCR, TRC, TDR)$$

Where:

SMP = Stock Market Performance (proxy by stock market index)

TCR = Total Covid-19 cases recorded (cumulative)

TRC = Total recovery cases of Covid-19 (cumulative)

TDR = Total death of Covid-19 recorded (cumulative)

Based on econometric specification, the model becomes

$$SMP_t = \beta_0 + \beta_1 X1_t + \beta_2 X2_t + \beta_3 X3_t + \mu_t$$

Where:

$\beta_0$  = Constant

X1 = Total Covid-19 cases recorded

X2 = Total recovery cases of Covid-19

X3 = Total death of Covid-19

$\beta_1, \beta_2$  and  $\beta_3$  are the coefficients of the independent variables



### 3.6 Measurement of variables

S/N	Variable	Meaning	Position	Source
1	SMP	Stock Market Performance	Dependent	CBN Statistical Bulletin, 2020
2	TCR	Total Cases of Covid-19 recorded (cumulative)	Independent variable	National Centre for Disease Control (NCDC)
3	TRC	Total recovery cases of Covid-19 (cumulative)	Independent variable	National Centre for Disease Control (NCDC)
4	TDR	Total death of Covid-19 recorded (cumulative)	Independent variable	National Centre for Disease Control (NCDC)

## CHAPTER FOUR

### DATA ANALYSIS, PRESENTATION AND INTERPRETATION

#### Preamble

This section of the project showed the result of various analyses carried on the data, present the result in the appropriate manner and gives interpretation to the result

#### 4.1 Results

The model summary in regression analysis displays the model's predictive power. R is the coefficient of correlation between the dependent variable (observed) and the independent variable(s), the predictor (s). The sign of R denotes the relationship's direction (positive or negative), with values ranging from -1 to 1. The strength of a relationship is indicated by the absolute value of R, with a larger absolute value suggesting a strong association. In regression analysis, the R squared (coefficient of determination) indicates the degree of linear-correlation of variables (fitness of fit). This is the percentage of variation in the dependent variable that the regression model can explain. In other words, it illustrates how much variance in the dependent variable can be explained by the independent variable(s). The sample R squared is a conservative approximation of the model's fit to the population. Only the number of variables in the regression model was modified in the adjusted R square. The standard deviation of the residuals represents the standard error of the estimate.

It seeks to correct R squared to more accurately reflect the model's goodness of fit. It's the R squared value for the number of variables in the regression model adjusted for the number of variables. The standard error of estimates is the difference between the residuals' standard deviation and the standard error of the estimates. The standard error of the estimate lowers as R squared grows. To put it another way, a better match results in less estimate error. It's a good indicator of how accurate the sample statistic's estimate of the population parameter is. The

ANOVA table shows the model's overall significance. When the population characteristics (mean and standard deviation) are unknown, the t-test is performed.

The T-test is based on the t-distribution and is considered an appropriate test for determining the significance of a difference between the means of two samples in the event of a limited sample size and unknown population variance. The F-statistic is calculated by dividing the regression mean square (MSR) by the residual mean square. F-statistics use the significance level of the model to determine whether it is a good match for the data. F-statistics with a significant value indicate that the model is better than average in predicting the dependent variable's outcome value. If the significance value of the F-statistics is smaller than 0.05, the independent variable(s) is significant to explaining the variation in the independent variable and the null hypothesis is accepted.

The standard co-efficient or beta is an attempt to make the regression co-efficient more comparable. It provides a useful way of seeing what impact of changing the explanatory variable by one standard deviation it will have on the independent variable. It is usually equal to the correlation co-efficient between the variables.

## 4.2 Descriptive Statistics

Table 4.1

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Stock Market Performance	263	20669.38	42412.66	30285.0825	7028.74798
Total cases of Covid-19 recorded	263	2	163498	64354.66	51189.914
Total recovery cases of Covid-19	263	0	161440	58316.55	-5343.8.117
Total Covid-19 Death recorded	263	0	2058	991.30	603.659
Valid N (list wise)	263				

The descriptive statistics reveals the feel of the data used in the analysis. The minimum value for the stock market index is 20669.38; Total cases of covid-19 recorded had 2 as minimum, while total recovery cases and covid-19 death as minimum, 0. The maximum value for stock market index is 42412.66, total recovered cases cumulatively maximum is 163498, total recovery cases had 58316.55 and total covid-19 death recorded maximum value is 2058. The mean is the average value for all the variables. The mean of stock market performance 30285.0825, the total cases recorded mean value is 64354.66, total recovery cases mean is 58316.55, while the total death mean value is 991.30. The standard deviation value for stock market index is 7028.75; total cases reported has 51189.94 has standard deviation; the standard deviation for total recovery cases is -5343.8, while the total death cases has 603.66 has the standard deviation

## TEST OF HYPOTHESES

**Hypothesis 1:** The relationship between stock market performance and total cases of COVID-19 reported.

Table 4.2

(a)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.904 <sup>a</sup>	.818	.817	3006.25621

a. Predictors: (Constant), Total cases of Covid-19 recorded

(b )

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10584856680.7 99	1	10584856680.7 99	1171.205	.000 <sup>b</sup>
	Residual	2358807442.63 9	261	9037576.409		
	Total	12943664123.4 38	262			

a. Dependent Variable: Stock Market Performance

b. Predictors: (Constant), Total cases of Covid-19 recorded

(c)

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	22294.334	298.130		74.781	.000
	Total cases of Covid-19 recorded	.124	.004	.904	34.223	.000

a. Dependent Variable: Stock Market Performance

From the regression tables above (Table 4.2 a – c), the model summary result indicated that there is a positive and very strong correlation between total cases of covid-19 and stock market index between 16<sup>th</sup> of March 2020 and 7<sup>th</sup> April, 2021 in Nigeria. This is reflected on the value of the co-efficient of the correlation (R) which is 0.904. This value indicates that the strength of the relationship the two variables under study are about 90.4% while other variables in the model are held constant. The co-efficient of determination ( $R^2$ ) showed a value of 0.818 which indicates about 81.8%. This result implies that on the average, a variation in stock market performance within the period under review is systematically explained by 81.8% changes in total cases of covid-19. This is also explained by the value of t-statistics = 34.223 and its probability value of 0.000. The probability value is below the benchmark of 0.05 (5%). The decision rule follows that if the t-value and its corresponding p-value is above the 5% level of significance, we reject the null hypothesis of no significant relationship and accept the alternative hypothesis of significant relationship. In this instance, it is below, resulting in accepting the alternate hypothesis of significant relationship. In essence, total cases of covid-19 have a positive relationship and significant with the stock market index between the period of 16<sup>th</sup> March, 2020 and 7<sup>th</sup> April, 2021 in Nigeria.

**Hypothesis 2:** The relationship between total recovery cases and stock market performance in Nigeria.

Table 4.3

(a)

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.924 <sup>a</sup>	.853	.853	2698.21271

a. Predictors: (Constant), Total recovery cases of Covid-19

(b)

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11043492302.196	1	11043492302.196	1516.890	.000 <sup>b</sup>
	Residual	1900171821.242	261	7280351.806		
	Total	12943664123.438	262			

a. Dependent Variable: Stock Market Performance

b. Predictors: (Constant), Total recovery cases of Covid-19

(c)

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	23200.027	246.525		94.108	.000
	Total recovery cases of Covid-19	.121	.003	.924	38.947	.000

a. Dependent Variable: Stock Market Performance

From the regression tables above (Table 4.3 a – c), the model summary result indicated that there is a positive and very strong correlation between total recovery cases of covid-19 and stock market index between 16<sup>th</sup> March, 2020 and 7<sup>th</sup> April, 2021 in Nigeria. This is reflected on the value of the co-efficient of the correlation (R) which is 0.924. This value indicates that the strength of the relationship the two variables under study are about 92.4% while other variables in the model are held constant. The co-efficient of determination (R<sup>2</sup>) showed a value of 0.853 which indicates about 85.3%. This result implies that on the average, a variation in stock market returns within the period under review is systematically explained by changes in total recovery of covid-19 cases. This is also explained by the value of t-statistics = 38.947 and its probability value of 0.000. The probability value is below the benchmark of 0.05 (5%). The decision rule follow that if the t-value and its corresponding p-value is below the 5% level of significance, we reject the null hypothesis of no significant relationship and accept the alternative hypothesis of significant relationship. In this instance, it is below, resulting in rejecting the null hypothesis of no significant relationship and acceptance of alternate hypothesis. In essence, the total covid-19 recovery, between 16<sup>th</sup> March, 2020 and 7<sup>th</sup> April, 2021 has a positive relationship with stock market index in Nigeria and the relationship is significant.

**Hypothesis 3:** The relationship between total deaths of Covid-19 and stock market performance in Nigeria.

Table 4.4

(a)

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.857 <sup>a</sup>	.735	.734	3626.83534

a. Predictors: (Constant), Total Covid 19 Death recorded



(b)

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9510487198.92	1	9510487198.92	723.015	.000 <sup>b</sup>
		3		3		
	Residual	3433176924.51	261	13153934.577		
		5				
	Total	12943664123.4	262			
		38				

a. Dependent Variable: Stock Market Performance

b. Predictors: (Constant), Total Covid 19 Death recorded

(c)

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	20391.250	430.585		47.357	.000
Total Covid 19 Death recorded	9.981	.371	.857	26.889	.000

a. Dependent Variable: Stock Market Performance

From the regression tables above (Table 4.4 a – c), the model summary result indicated that there is a positive and very strong correlation between total cases of covid-19 death and stock market returns in Nigeria between 16<sup>th</sup> March, 2020 and 7<sup>th</sup> April, 2021. This is reflected on the value of the co-efficient of the correlation (R) which is 0.857. This value indicates that the strength of the relationship the two variables under study are about 85.7% while other variables in the model are held constant. The co-efficient of determination (R<sup>2</sup>) showed a value of 0.735 which indicates about 73.5%. This result implies that on the average, a variation in stock market within the period under review is systematically explained by 73.5% changes in total cases of covid-19 death. This is also explained by the value of t-statistics = 26.889 and its probability value of 0.000. The probability value is below the benchmark of 0.05 (5%). The decision rule follows that if the t-value and its corresponding p-value is below the 5% level of significance, we reject the null hypothesis of no significant relationship and accept the alternative hypothesis of significant relationship. In this instance, it is below, resulting in rejecting the null hypothesis of no significant relationship and accepting the alternate hypothesis. In essence, the total cases of covid-19 death between 1<sup>st</sup> April, 2019 and 31<sup>st</sup> March, 2020 have a positive relationship with stock market return and the relationship is significant.

Overall regression on the relationship of the dependent variable (stock market index) and the independent variables (total cases of covid-19, total recovery cases of covid-19 and total recorded death of covid-19)

Table 4.5

(a)

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.935 <sup>a</sup>	.874	.873	2507.44753

a. Predictors: (Constant), Total Covid-19 Death recorded, Total recovery cases of Covid-19, Total cases of Covid-19 recorded

(b)

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11315255207.648	3	3771751735.883	599.901	.000 <sup>b</sup>
	Residual	1628408915.790	259	6287293.111		
	Total	12943664123.438	262			

a. Dependent Variable: Stock Market Performance

b. Predictors: (Constant), Total Covid 19 Death recorded, Total recovery cases of Covid-19, Total cases of Covid-19 recorded

(c)

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	24055.093	371.467		64.757	.000
	Total cases of Covid-19 recorded	-.265	.043	-1.933	-6.167	.000
	Total recovery cases of Covid-19	.331	.032	2.517	10.305	.000
	Total Covid 19 Death recorded	4.040	1.233	.347	3.277	.001

a. Dependent Variable: Stock Market Performance

From the overall regression tables above, the interaction of the dependent variable (stock market index and the three independent variables (total cases of covid-19, total covid-19 recover cases and total covid-19 death cases) indicate different relationship. Total cases of covid-19 exhibit a significant negative relationship, while total recovery cases and total death exhibit significant positive. The f-statistics value of 599.901 and its corresponding value of 0.000 showed the

independent variables jointly have significant relationships with stock market returns in Nigeria within the period 16<sup>th</sup> March 2020 and 7<sup>th</sup> April, 2021.

The overall regression equation is:

$$\text{SMP} = 24055.093 - 0.265 (\text{TCR}) + 0.3331 (\text{TRC}) + 4.040 (\text{TDR}) + \mu$$

### **4.3 Discussion of results**

The stock market index relationship with total cases of reported covid-19 is positive and significant; this signifies that an increase in the total cases reported lead to an increase in the stock market index for the period under review. As contrary to expectation, the increase in the reported cases of covid-19 is expected to have a negative relationship with each other ceteris paribus. Information such as increase in total reported cases of covid-19 is expected to have a negative impact on the stock market index. It only shoes that stock market index is not sensitive negatively to the impact of increase value of covid-19 cases. This agrees with Baig, Butt, Haroon and Rizvi (2020), contrary to Al-Awadhi et al. (2020).

The stock market index relationship with total recovery cases indicated a positive and significant relationship. An increase in the recovery cases has the expected relationship with stock market index ceteris paribus. This agrees with the study of Ding et al. (2020), but is contrary to the findings of Lopatta et al. (2020).

The stock market index relationship with total death recorded indicated a positive and significant relationship. This depicted that an increase in the death figure due to covid-19 does not have the expected negative relationship with stock market index ceteris paribus. This agrees with Takahashi and Yamada (2020), but contrary to Ibikunle and Rzayev (2020).

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATION**

#### **Preamble**

In this section, the summary of the study findings is discussed; conclusion is then made to the study while the recommendations were eventually made

#### **5.1 Summary**

This study set out to investigate the relationship between stock market index, a proxy for stock market performance and the covid-19 pandemic. The variables emanating from covid-19 which serves as the independent variables for this study are; total reported cases of covid-19, total reported recovery cases of covid-19 and the total death of covid-19 recorded. Each value for these variables was regressed against the value of stock market index within the period of the study. The result indicated that all the variables have a positive and significant relationship with stock market index.

The expectation according to efficient market hypothesis is that the market synthesized all available information which eventually affects pricing and ultimate, the stock value. With the negative information such as the pandemic information, the market is expected to react to them, negatively. It has only shown that the stock market in Nigeria is inefficient, as it does not react to information as it is expected.

#### **5.2 Conclusion**

Having analyzing all the information that the data has revealed, and relating them to theory, it could be concluded that the negative information that comes out from the covid-19 pandemic does not really affect the stock market performance. This has only confirmed that the Nigerian stock market as inefficient as it is, does not process the negative information for it to affect the happening in the market. It has only confirmed that there still available in the Nigerian capital market a lot of asymmetric (unequal) information.

#### **5.3 Recommendation**

The following recommendations would therefore be deduced from this study:

Firstly, a good information management system should be built in the exchange so as to imbue the efficiency needed in the stock exchange. An efficient market benefits both the nation and the

participants in the stock market. It portends good tidings and manifold development into the market. As the country is encouraging capital market integration with the rest of the world, equal information is important to engendering this.

Secondly, the participants in the market should be encouraged not to intentionally douse market sentiments which are part of the things that makes capital market very active and efficient place to invest in. Lastly, the asymmetric information will not benefit the market in the long run.

Although, there is no way to eradicate in in any financial market, its reduction will go a long way to assisting the capital market to be what is supposed to be, a place where no investor can take advantage of any information to outsmart another investor.

#### **5.4 Suggested area for further study**

The study suggested that the area of the use of Artificial intelligence in filtering information to the market should be considered in the future. For such information as the covid-19 pandemic not to impact stock market performance, market sentiment is highly lacking. Such will go a long way to allay the fear that participants most often times kill information.

## REFERENCES

- Adeniran J. (1991) on the role of stock exchange privatization and commercialization publish in Nigerian.
- Al-Awadhi, A. M., Al-Saifi, K., Al-Awadhi, A., & Al Hammadi, S. (2020). Death and contagious infectious diseases: Impact of the COVID-19 virus on stock market returns. *Journal of Behavioral and Experimental Finance*, 100326.
- Ashraf, B. N. (2020). Stock markets' reaction to COVID-19: cases or fatalities? Research in International Business and Finance, 101249.
- Asongu, S. A., & Acha-Anyi, P. N. (2019). The murder epidemic: A global comparative study. *International Criminal Justice Review*, 29(2), 105-120.
- Alile H.E (1991) The Nigerian stock in operation, NSE FEC Book Nigerian.
- Alice A. L (1992) Nigerian Capital Market and Securitization of Domestic public debts NSE
- Baig, A., Butt, H. A., Haroon, O., & Rizvi, S. A. R. (2020). Deaths, panic, lockdowns and US equity markets: The case of COVID-19 Pandemic. Available at SSRN 3584947.
- Chen, M. H., Jang, S. S., & Kim, W. G. (2007). The impact of the SARS outbreak on Taiwanese hotel stock performance: An event-study approach. *International Journal of Hospitality Management*, 26(1), 200-212

Gerding, E. F. (2005). The next epidemic: Bubbles and the growth and decay of securities regulation. *Conn. L. Rev.*, 38, 393.

Ibikunle, G., & Rzayev, K. (2020). Volatility, dark trading and market quality: Evidence from the 2020 COVID-19 pandemic-driven market volatility. Available at SSRN 3586410.

Lopatta, K., Alexander, E. K., Gastone, L. M., & Tammen, T. (2020). To report or not to report about Coronavirus? The role of periodic reporting in explaining capital market reactions during the Global COVID-19 pandemic. The role of periodic reporting in explaining capital market reactions during the global COVID-19 pandemic. (April 3,2020).

Ozili, P. K. (2020). COVID-19 in Africa: Socioeconomic impact, policy response and opportunities. *Policy Response and Opportunities* (April 13,2020).

Schoenfeld, J. (2020). The invisible risk: Pandemics and the financial markets. Available at SSRN 3567249.

SOYODE B.A (1997) To word efficient Petroleum industry in Road Models  
Interactional law and Business Quarterly vol 2 No.4 Nigerian



Tashanova, D., Sekerbay, A., Chen, D., Luo, Y., Zhao, S., & Zhang, T. (2020).

Investment opportunities and strategies in an Era of Coronavirus  
pandemic. Available at SSRN 3567445.

Wool f. and saugster (2002). Business Accounting 2 international student. Edition sight  
edition page 60-61 and 278.