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Signature of student	**date**
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Signature of the supervisor	**date**
……	…….
Signature of department chairperson	**date**

DEDICATION

I dedicate this piece of work to myself. Thank you for not giving up on you, thank you for being the strongest person I know.

“There was never a night or a problem that could defeat sunrise or hope”- Bernard Williams.

ACKNOWLEDGEMENTS

I acknowledge God the Almighty for the strength he gave me to see this study through. Among the people who have been enormously helpful in the preparation of this research I wish to extend my gratitude to my supervisor Dr. Mauchi for sparing her special time, extending her patience and encouragement to greater heights.

My sincere thanks also goes to the Managing Director of Zimbabwe Stock Exchange for giving me authority to do my research in their organisation. Special thanks goes to my family members and my friends for all the support and helpful suggestions and not forgetting my late Daddy Raymond Njanike who inspired me so much in pursuing my career in Banking and Finance. May his soul continue to rest in peace and may God bless you all abundantly.

ABSTRACT

The aim of this study was to investigate the impact of Covid-19 restrictions on the performance of financial markets**.** The unavailable assessment of the effects of Covid-19 on the performance of the financial markets in Zimbabwe motivated the researcher to dig deeper into this problem. The researcher developed the objectives to determine the types of Covid-19 restrictions particularly on the financial markets, to determine the impact of travel bans, decongesting industries, total shutdowns, and reduced operational time on the performance of financial markets. The researcher developed hypotheses to address these objectives. A descriptive survey research design was used as well as a quantitative research approach. Also, primary data source was used in the form of a questionnaire in gathering information. The target population was 88 potential respondents, a sample of 72 participants was taken using the Yamane's sample size formula. Data was analysed using SPSS (version 20) and Microsoft Excel (2016). Reliability and validity of the data was tested using statistical methods. This study shows a negative relationship between Covid-19 restrictions and the performance of financial markets, as pointed by hypotheses, regression and correlation analysis. The researcher recommended that future researchers should expand the scope of the studies and focus more on the entire stock exchanges available in Zimbabwe.

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BUSE	-Bindura University of Science Education
COVID-19	-Corona Virus Disease 2019
ZSE	-Zimbabwe Stock Exchange
SPSS	-Statical Package for the Social Science
IMF	-International Monetary Fund
UN	-United Nations
ACCA	-Association of Certified Chartered Accountants
JSE	-Johannesburg Stock Exchange
SECZim	-Security Exchange Council of Zimbabwe
RBZ	-Reserve Bank of Zimbabwe
IPO	-Initial Public Offering
NYSE	-New York Stock Exchange
OTC	-Over the counter
MM's	-Market Makers
CD's	-Certificate of Deposit
CBOE	-Chicago Board Options Exchange
CME	-Chicago Mercantile Exchange
ICE	-Intercontinental Exchange
P2P	-Peer to Peer
WHO	-World Health Organisation
GARCH	-Generalized Auto-regression Conditional Heteroscedasticity

CHAPTER I

INTRODUCTION

1.0 Introduction

This chapter focuses on introducing the study area, focusing on laying out the background of the study and deriving the research problem thereof. The research objectives are crafted to show how the researcher intends to attempt to solve the research problem. The research questions and hypothesis follow the objectives. The researcher shows the intended significance of the study, the limitations and delimitations of the study are also shown in this chapter.

1.1 Background of the study

Globally, Covid-19 has had a negative impact on business overall (Chi & Lin, 2021). The world has seen a downward trend in almost every trade to date. The IMF (International Monetary Fund), the World Bank, the UN (United Nations) and other international organisations have all exclaimed how appalling the state of financial performance globally has become (Michael, 2020). In that line of thought, the corporate world was most affected, not only by the pandemic itself, but the extreme measures taken to ensure safety by governments. Actions like lockdowns, curfews and restrictions in movement led to complications in the commercial world which saw the diminishing performance of most trades (Habbakuk, 2021). The financial markets, stock markets, the bond market, forex commodities and the real estate market were all negatively affected by the Covid-19 pandemic across the globe (Tazegul, 2021).

The situation was similar in Africa, where the financial markets were negatively affected by the pandemic. Adebayo (2021) found that in Ghana, the majority of the stocks on the stock market lost value. In Nigeria, Okonkwo (2020) came to a similar conclusion as his discovery also factored in the loss in value of the forex commodities trades. Overall, the industries in Southern Africa were found to be underperforming (ACCA, 2021) and the main attribute was logistical difficulties brought by the Covid-19 pandemic and the subsequent restrictions that came with the pandemic. Van Linde (2021) in South Africa opined that, the financial markets in South Africa,

particularly the Johannesburg Stock Exchange (JSE), have shown a diminishing performance in stocks trades, forex commodities and real estate market due to the negative externalities of the Covid-19 pandemic and the subsequent restrictions the South African government placed upon its economy.

In Zimbabwe, in 2021, the Financial Gazette (2021) indicated that there were further losses of confidence on the ZSE and its finance market due to the insecurity springing from the Covid-19 effects. The pandemic led to businesses making losses, cutting down on operations, shutting down and winding up of other companies. In that line of thought, people had low confidence on the Zimbabwean stock market, forex commodities and other finance markets were also negatively affected. However, the literature is not extensive in the Zimbabwean context to come to a conclusion of the effect that Covid-19 has had on the financial markets of Zimbabwe. Thus, the following problem ensued.

1.2 Statement of the problem

There is limited knowledge on the extent to which the Covid-19 restrictions have on the financial markets in Zimbabwe. The aim of this study therefore, is to try and understand the impact which the Covid-19 pandemic has had on the financial markets in Zimbabwe, specifically, on the Zimbabwe Stock Exchange.

1.3 Research objectives

1. To determine the types of Covid-19 restrictions that were imposed on the financial markets.
2. To determine the impact of travel bans on the performance of financial markets.
3. To determine the impact of total shut down on the performance of financial markets.
4. To determine the impact of decongesting of industries on the performance of financial markets.
5. To determine the impact of reduced operational time on the performance of financial markets.

1.4 Research questions

1. What are the types of Covid-19 restrictions that were imposed on the financial markets?

2. What is the impact of travel bans on the performance of financial markets?
3. What is the impact of total shut down on the performance of financial markets?
4. What is the impact of decongesting of industries on the performance of financial markets?
5. What is the impact of reduced operational time on the performance financial markets?

1.5 Research hypothesis

H_1: There is a negative relationship between the travel bans and performance of financial markets

H_2: There is a negative relationship between total shutdown and the performance of financial markets.

H_3: There is a negative relationship between decongesting of industries and the performance of financial markets

H_4: There is a negative relationship between reduced operational time and the performance of financial markets.

1.6 Significance of the study

The following section shows the significance of the study to the various stated stakeholders:

1.6.1 Significance to practice

The researcher opines that the companies and individuals partaking in the trade of financial instruments and properties on the finance markets will find this study significant. The study helps such practitioners to gain an understanding of how Covid-19 restrictions have shaped the financial markets and what to expect in terms of change. Since some financial markets are highly volatile and respond highly to changes in the environment, the researcher believes that practitioners in the financial markets should find this study as an advantage in understanding the behaviour of financial markets during disruptions like the pandemic Covid-19.

1.6.2 Significance to theory

The study is significant to the theory in financial markets because it shows a unique perspective of the behaviour of financial markets during disruptive periods. This study adds to the literature available on financial markets and the contemporary Covid-19 disruption. This study is

significant because it adds to the existing knowledge, some valuable information regarding the responses of the financial markets towards disruptions in modern times, and the case of Zimbabwe further strengthens the available information in making it more relevant.

1.6.3 Significance to policy

The study is of significance to the policy makers in the finance markets, particularly ZSE (Zimbabwe Stock Exchange), SECZim (Securities Exchange Council of Zimbabwe) and the RBZ (Reserve Bank of Zimbabwe) because it points to the aspects within the financial markets which were affected by the restrictions imposed during the Covid-19 era. The knowledge within this study allows the policy makers to gain an understanding of how their policies were affected by the pandemic, the nature of the effect and the extent of the effect, whether it was strong or not. Thus, by and large, this study serves as a review of how effective such policies were during the Covid-19 era.

1.6.4 Significance to the researcher and other academics

The study is significant to the researcher and to other academics in a similar field because it explores a passionate subject. The understanding of financial markets, their behaviours and their operations in contemporary times adds to the value of the researcher as an intellectual in understanding banking and finance. This study marks the beginning of a long journey towards a deeper understanding of financial markets and appreciating, through research, the profound concepts in banking and finance.

1.7 Limitations of the study

The researcher faced the limitations in the following areas:

1. The researcher was limited in terms of finding adequate time to carry out the research and gather data on all the players in the financial market of Zimbabwe in order to come up with a comprehensive understanding of the research problem. The researcher circumvented this problem by making use of the sampling techniques and procedures available in order to narrow the focus of the study and still retain reliability and validity of the study.
2. The researcher was limited in terms of resources to carry out data collection from institutions participating in the financial markets of Zimbabwe. To circumvent this, the

researcher used a case study approach and narrowed the study to the Zimbabwe Stock Exchange.

1.8 Delimitations of the study

The researcher delimited the focus of the study to a single case, the Zimbabwe Stock Exchange. This is the primary financial market in Zimbabwe and is considered, for the sake of this study, the best and most reliable source of information.

The study limited its effort from January 2020 to January 2022.

1.9 Chapter summary

This chapter focused on introducing the study, showing the background and the problem of the study. The researcher in this chapter illustrated how Covid-19 has been a disruption in various industries including financial markets. The objectives of the study were outlined in the chapter and they focus on trying to establish the connection between Covid-19 restrictions and performance of financial markets in Zimbabwe. The following chapter shows the literature review of the study.

CHAPTER II

LITERATURE REVIEW

2.0 Introduction

This chapter focuses on outlining the literature surrounding the area of the study. The chapter brings forth the theoretical framework upon which the study is based, and then follows to indulge the empirical evidence of the study. The chapter continues to show the conceptualization of the study by the researcher and a brief gap analysis showing the focus of the study.

2.1 Conceptual framework

2.1.1 Financial markets

Financial markets refer broadly to any marketplace where the trading of securities occurs, including the stock market, bond market, forex market, and derivatives market, among others (Bonga, 2014). Financial markets are vital to the smooth operation of capitalist economies.

2.1.1.1 Types of Financial Markets

2.1.1.1.1 Stock Markets

Perhaps the most ubiquitous of financial markets are stock markets. These are venues where companies list their shares and they are bought and sold by traders and investors (Ashraf, 2020). Stock markets, or equities markets, are used by companies to raise capital via an initial public offering (IPO), with shares subsequently traded among various buyers and sellers in what is known as a secondary market (Choi, 2022).

Stocks may be traded on listed exchanges, such as the New York Stock Exchange (NYSE) or Nasdaq, or else over-the-counter (OTC) (Goodell, 2020). Most trading in stocks is done via regulated exchanges, and these play an important role in the economy as both a gauge of the overall health of the economy as well as providing capital gains and dividend income to investors, including those with retirement accounts such as IRAs and 401(k) plans (Haldar & Sethi, 2021).

Typical participants in a stock market include (both retail and institutional) investors and traders, as well as market makers (MMs) and specialists who maintain liquidity and provide two-sided

markets (Guel, 2020). Brokers are third parties that facilitate trades between buyers and sellers but who do not take an actual position in a stock.

2.1.1.1.2 Over-the-Counter Markets

An over-the-counter (OTC) market is a decentralized market—meaning it does not have physical locations, and trading is conducted electronically—in which market participants trade securities directly between two parties without a broker (Gubareva, 2021). While OTC markets may handle trading in certain stocks (e.g., smaller or riskier companies that do not meet the listing criteria of exchanges), most stock trading is done via exchanges (Li, 2021). Certain derivatives markets, however, are exclusively OTC, and so they make up an important segment of the financial markets (Jegajeevan, 2012). Broadly speaking, OTC markets and the transactions that occur on them are far less regulated, less liquid, and opaque.

2.1.1.1.3 Bond Markets

A bond is a security in which an investor loans money for a defined period at a pre-established interest rate (Magweva & Sibanda, 2020). A bond can be seen as an agreement between the lender and borrower that contains the details of the loan and its payments (Mahonye & Mandishara, 2014). Bonds are issued by corporations as well as by municipalities, states, and sovereign governments to finance projects and operations. The bond market sells securities such as notes and bills issued by the Reserve Bank of Zimbabwe, for example. The bond markso is called the debt, credit, or fixed-income market (Mahonye & Mandirasha, 2014).

2.1.1.1.4 Money Markets

Typically, the money markets trade in products with highly liquid short-term maturities (of less than one year) and are characterized by a high degree of safety and a relatively low return in interest. At the wholesale level, the money markets involve large-volume trades between institutions and traders (Mashamba & Magweva, 2019). At the retail level, they include money market mutual funds bought by individual investors and money market accounts opened by bank customers. Individuals may also invest in the money markets by buying short-term certificates of deposit (CDs), municipal notes, or treasury bills, among other examples.

2.1.1.1.5 Derivatives Markets

A derivative is a contract between two or more parties whose value is based on an agreed-upon underlying financial asset (like a security) or set of assets (like an index) (Phandis, 2021). Derivatives are secondary securities whose value is solely derived from the value of the primary security that they are linked to (Pillai, 2021). In and of itself a derivative is worthless. Rather than trading stocks directly, a derivatives market trades in futures and options contracts, and other advanced financial products, that derive their value from underlying instruments like bonds, commodities, currencies, interest rates, market indexes, and stocks (Rehman & Siddiquil, 2021).

Futures markets are where futures contracts are listed and traded. Unlike forwards, which trade OTC, futures markets utilize standardized contract specifications, are well-regulated, and utilize clearinghouses to settle and confirm trades (Phandis, 2021). Options markets, such as the Chicago Board Options Exchange (CBOE), similarly list and regulate options contracts (Rehman & Siddiquil, 2021). Both futures and options exchanges may list contracts on various asset classes, such as equities, fixed-income securities, commodities, and so on (Mashamba & Magweva, 2019).

2.1.1.1.6 Forex Market

The forex (foreign exchange) market is the market in which participants can buy, sell, hedge, and speculate on the exchange rates between currency pairs (Zaremba, 2021). The forex market is the most liquid market in the world, as cash is the most liquid of assets (Phandis, 2021). The currency market handles more than $6.6 trillion in daily transactions, which is more than the futures and equity markets combined (Cho, 2022).

As with the OTC markets, the forex market is also decentralized and consists of a global network of computers and brokers from around the world. The forex market is made up of banks, commercial companies, central banks, investment management firms, hedge funds, and retail forex brokers and investors (Munyoki, 2018).

2.1.1.1.7 Commodities Markets

Commodities markets are venues where producers and consumers meet to exchange physical commodities such as agricultural products (e.g., corn, livestock, soybeans), energy products (oil,

gas, carbon credits), precious metals (gold, silver, platinum), or "soft" commodities (such as cotton, coffee, and sugar) (ZSE, 2019). These are known as spot commodity markets, where physical goods are exchanged for money.

The bulk of trading in these commodities, however, takes place on derivatives markets that utilize spot commodities as the underlying assets (Zhang, 2020). Forwards, futures, and options on commodities are exchanged both OTC and on listed exchanges around the world such as the Chicago Mercantile Exchange (CME) and the Intercontinental Exchange (ICE) (Bonga, 2021).

2.1.1.1.8 Crypto currency Markets

The past several years have seen the introduction and rise of crypto currencies such as Bit coin and Ethereum, decentralized digital assets that are based on block chain technology (Zhang, 2020). Today, thousands of crypto currency tokens are available and trade globally across a patchwork of independent online crypto exchanges (Bonga, 2021). These exchanges host digital wallets for traders to swap one crypto currency for another, or for fiat monies such as dollars or Euros.

Because the majority of crypto exchanges are centralized platforms, users are susceptible to hacks or fraud (Zhang, 2020). Decentralized exchanges are also available that operate without any central authority. These exchanges allow direct peer-to-peer (P2P) trading of digital currencies without the need for an actual exchange authority to facilitate the transactions. Futures and options trading are also available on major crypto currencies (Riaz, 2020).

2.1.2 COVID-19

In December 2019, in Wuhan, China there were reports of flu like disease which was a result of sea-food and was highly contagious. This was how the Covid-19 virus broke out and how the whole globe was put into an emergency mode the following year, 2020. The virus spread quickly across the globe and was more prevalent in winter seasons across the globe. To date, November 2020, there are a million deaths attributed to the virus. On 15 November 2020, there were 1,308,975 recorded deaths, 53,766,728 confirmed cases and 220 countries which have these cases (WHO, 2020). This shows that the Covid-19 pandemic is wide spread globally and has had over a million deaths to its claim. This show how prevalent it is and how it requires to be handled with care.

In Africa the covid 19 statistics are a bit more giving than the rest of the world. There have been 1,946,369 cases recorded overall. South Africa being the country hit the hardest with a statistic of 744,732 cases and Western Sahara being the least hit with only 10 cases recorded.

In Zimbabwe the Covid-19 statistics show a total of 8,786 cases with 257 deaths and 8,096 recoveries. The cases started skyrocketing in June, probably this is because it was during winter where the Covid-19 virus thrives. From June 2020 the cases have been on a rise. To date however, the Covid-19 pandemic has faced a decline. There were various mutations of the Covid-19 virus, with one of them being Omicron variant of Covid-19. All these experiences have been summarized by the researcher to refer to Covid-19 implications. In the second half of 2021, from July till December, the Covid-19 related cases and restrictions from the government have been on a downward slope.

2.2 Theoretical framework

The study is based on the theory of demand and supply and the prospect theory.

2.2.1 Prospect theory

The prospect theory can also be known as the loss-aversion theory. Prospect theory states that people's perceptions of gain and loss are skewed (Cho, 2022). That is, people are more afraid of a loss than they are encouraged by a gain. If people are given a choice of two different prospects, they will pick the one that they think has less chance of ending in a loss, rather than the one that offers the most gains (Zaremba, 2021).

This theory is important to the study because it depicts how people behave in response to risk and uncertainty, of which Covid-19 brought along a lot of risk and uncertainty.

2.2.2 Theory of demand and supply

The theory of demand and supply states that in an economy or trade, the demand of a product is affected by the supply and vice versa. The demand and the supply will adjust each other until they reach equilibrium (Graham, 2018). Thus, if there is an increase in the demand of a product, the supply has to rise to meet the demand. This creates a shortage in a market and usually drives the price upward because it is scarce on the market. If the demand of a product goes low, the supply often drops to meet the standards of the demand at a lower equilibrium (Mzumara, 2019). This leads to lowering of prices in an effort to clear the excess stock.

In this study, this implies that, with the increased risk of the financial markets due to uncertainty and negative perception from the traders, the demand of the financial market products went low. This led to decrease in the perceived value of the financial market.

2.3 Empirical evidence

The following information regards the previous studies which the researcher found regarding the relationship between the Covid-19 pandemic and financial markets:

2.3.1 Endri (2021) Stock price volatility during the COVID-19 pandemic: the GARCH model.

The great uncertainty of COVID-19 and its associated economic losses caused stock markets to become highly volatile and unpredictable. Thus, much research focuses on the association between the pandemic COVID-19 and the volatility of the financial market. Endri. (2021) examines stock prices' response to COVID-19 for Indonesia Stock Exchange. The study employs an event study approach and GARCH model for January 6, 2020 – March 16, 2020. The study findings indicate that abnormal returns react negatively to COVID- 19, and volatility fluctuation is very wide during the pandemic. GARCH (1,2) model is utilized for assessing volatility and predicting abnormal stock returns. The study concludes that to face uncertainty and increased volatility conditions, several lines of risk management are required for stock portfolio management. The conditions open speculation opportunities as markets will be inefficient.

2.3.2 Yong (2021) The impact of COVID-19 pandemic on stock market return volatility: evidence from Malaysia and Singapore.

Yong. (2021) estimates the volatility of two Asian stock markets: Bursa Malaysia and Singapore Exchange. Daily indices closing prices between July 1, 2019, and August 31, 2020, are used, dividing the sample into pre-COVID-19 and COVID-19 periods. GARCH, GARCH-M, TGARCH, EGARCH, and PGARCH models are applied for each subsample, with the best model selected using the lowest Schwarz information criterion (SIC). Both stock market returns are found to be quite persistent, and the persistence decreases for both stock market returns during the pandemic period. The paper concludes that the COVID-19 pandemic altered the distributional properties of GARCH models.

2.3.3 Gherghina (2021) COVID-19 pandemic and Romanian stock market volatility: a GARCH approach.

A study on the Romanian stock market by Gherghina (2021), investigates the volatility of daily returns for January 2020 - April 2021. GARCH (1,1) approach is used for the quantitative investigation. The conditional volatility shows visible evidence of volatility that change over the explored period. Romanian equity market volatility increases in the first quarter of 2020 to a level almost similar to the one observed during the global financial crisis, and after that, volatility has a downward trend. Using the vector auto-regression (VAR) model, no causal link is detected between the COVID-19 variables and the stock market index.

2.3.4 Kusumahadi & Permana (2021) Impact of COVID-19 on global stock market volatility.

Kusumahadi and Permana (2021) examine the effect of COVID-19 on stock return volatility in 15 countries around the globe. High-frequency daily data from January 2019 to June 2020 is used. The study observes that exchange rate changes negatively impact stock returns in many countries. Structural changes are observed related to COVID-19. Relying on the TGARCH model, significant evidence exists about the impact of the COVID-19 pandemic on the stock return volatility in all nations examined except the United Kingdom.

2.3.5 Baker (2020) The unprecedented stock market impact of COVID-19.

A study by Baker (2020), attempts to identify the impact of a current pandemic on stock market volatility. The study discovers that government limitations on commercial activity and consumer restrictions are chief causes for increased volatility. Zhang (2021), concentrating on technologically advanced countries (U.S.A, China, Switzerland, Sweden, Netherlands, and United Kingdom), examine the effect of the COVID-19 pandemic on stock market risk using the TGARCH model. They obtain those global financial markets risk level has noticeably increased due to the pandemic. The study reveals that uncertainty brought by the pandemic and the linked economic damage make stock markets highly volatile.

2.4 Conceptual framework

The researcher came up with the following conceptual framework which was derived from the theoretical and empirical reviews done above:

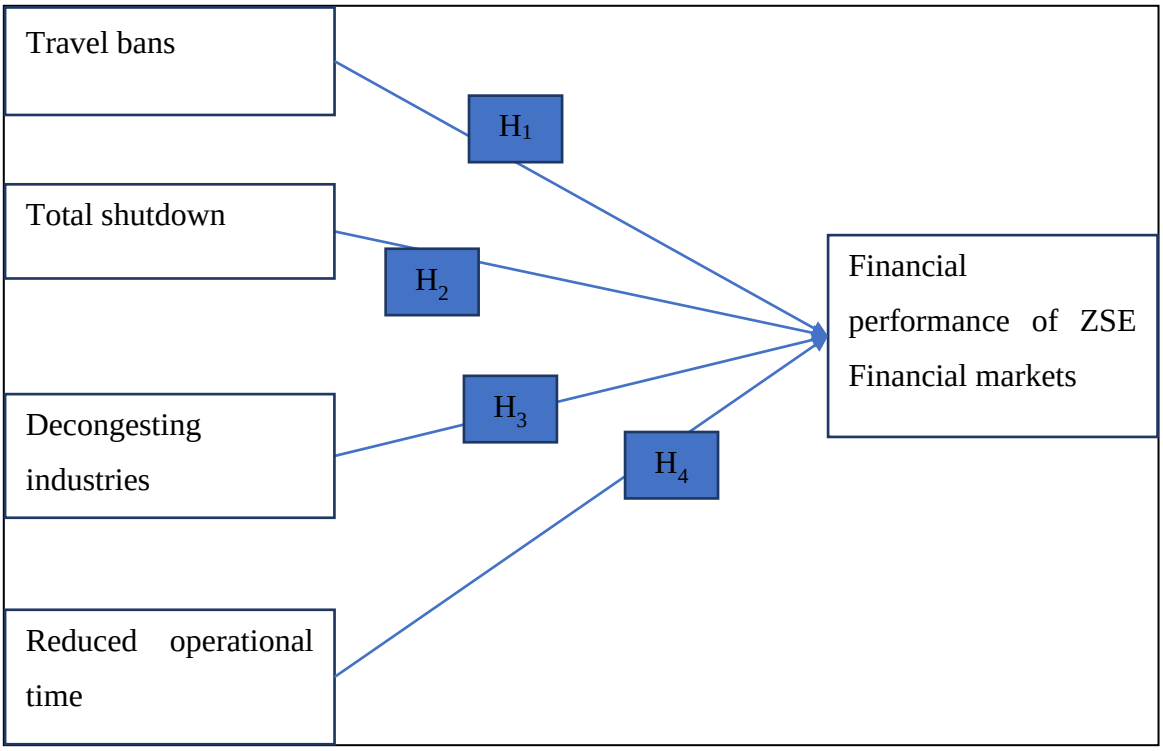


Fig 2.1 *Conceptual framework for the study. Source (Primary data, 2022)*

The above conceptual framework depicts the understanding of the researcher in the approach to the study. The researcher understands Covid-19 as a collection of Covid-19 restrictions being measured against the performance of the financial markets on the Zimbabwe Stock Exchange. This is analysed for its relationship with the Zimbabwe Stock Exchange, a primary finance market in Zimbabwe and the case of this study.

2.4 Research gap

From the review of the empirical literature of Covid-19 pandemic and stock market performance, there is a very sparse discussion on the reaction of stock returns to Covid-19 impact, particularly in African countries. Also, the Zimbabwean economy has experienced unprecedented changes following the emergence of the Covid-19 outbreak. Thus, this study investigates the impact of Covid-19 on the performance African financial markets, particularly focusing on a case of the Zimbabwean Stock Exchange.

2.5 Chapter summary

The chapter focused on the theoretical framework of the study and found that the study is based on the theory of demand and supply and the prospect theory. The chapter also showed the

conceptual framework of the study which brings out the variables of the study which the researcher intends to pursue. The following chapter shows the research methodology of the study.

CHAPTER III

RESEARCH METHODOLOGY

3.0 Introduction

This chapter seeks to outline the research methodology which the researcher adopted for the study. The chapter includes aspects of the research philosophy, research approach, research design, target population, sampling, research instruments, data analysis and presentation, ethical considerations, reliability and validity of the data. This chapter shows the approach which the researcher took in planning and gathering the data for the study.

3.1 Research design

A research design is a wholesome approach to the intention of the researcher (Saunders, 2020). A research design works as a map towards the intentions of the researcher and shows the format which the study adopts. It defines the way in which the researcher carries out the study and guides the choices of the researcher on the issues which are crucial in the collection of data such as the research instruments, the research data types and other crucial information (Bell, 2021).

In this understanding, this study adopts the descriptive survey research design. By definition a descriptive survey research design is one that seeks to obtain information from immediate respondents in the field, preferably individuals existing in a particular environment/case (Creswell, 2020). A descriptive survey seeks to obtain the most meaningful information from participants in a study. In this study, the researcher targets the participants on the stock markets to become the participants in the study. The researcher seeks to establish how the Covid-19 era impacted the performance of finance market items. The choice of the research design will guide the choice of the methods that follow, the research approach, the research instruments, the data collected and the selection of the target population and sampling.

3.2 Research approach

The research follows quantitative research approach. Quantitative research is a type of research where the researcher focuses on numerical evidence in order to come to conclusions about the research questions (Bell, 2021). This implies that, the researcher looks for mathematical models and induction in order to understand the phenomenon surrounding the research problem. The use

of the quantitative approach was influenced by the past studies which showed a use of quantitative analysis models in understanding the impact of Covid-19 on various aspects of the economy. Phanidis (2021), Zaremba (2021) and (Bonga, 2021) followed the quantitative research approach. The nature of the variables in this study is quantitative and thus they can be modelled using quantitative models, therefore, the researcher opted for the use of the quantitative research approach.

3.3 Sources of data

The study focuses on primary sources of data for the descriptive survey. Primary sources of data are those sources of data where first-hand information is being obtained from the research subjects (Creswell, 2020). They involve the participation of respondents in the study (Creswell, 2020). The researcher seeks to obtain responses from the participants who are experienced and know first-hand the status quo surrounding the financial markets during Covid-19. The researcher sought, through a questionnaire, to understand each opinion of the respondents who had been sampled in an aim to fully understand the impact of Covid-19 on the performance of financial markets. The choice of the primary data was greatly influenced by the research design, as propounded by Creswell (2020).

3.4 Population and sampling

The following information relates to the target population and sampling procedure used by the researcher.

3.4.1 Target population

The researcher targets the employees working on the ZSE at the time of the study. The number of the employees working at ZSE during the study was 216 people. Of these, 88 people had the knowledge regarding the financial markets and their performance, thus, the researcher focused on a population of 88 people. Thus, the target population was 88 people.

3.4.2 Sampling

The researcher used the approach which was used by Gherghina (2021) and Zhang (2021) in coming up with a sample size. The researcher calculated the sample size using the 95% level of confidence and a 5% margin of error. The researcher used these on the population of 88 people

and found the recommended sample size to be 72 participants. The calculation of the sample size was done using the Yamane's formula as recommended by Creswell (2020).

The following shows the calculation of the sample size:

$$n_0 = \frac{N}{1 + N(e^2)}$$

Where N = population (88); e = desired accuracy level (0.95).

The result was found to be

$$n_0 = \frac{N}{1 + N(e^2)}$$

$$n_0 = \frac{88}{1 + 88(0.95^2)}$$

$$n_0 = 72$$

Thus, the sample size was 72 participants.

3.5 Research instruments

The researcher will use the questionnaire as a research instrument. This research instrument is influenced by the research design, which is a descriptive survey and the choice of primary source of data. The questionnaire is the most efficient tool in the circumstance of the research because it provides for the respondent to ponder over the questions and respond according to their best capacity. Unlike an interview which is more impromptu for research of this nature.

3.5.1 Questionnaire

A questionnaire is a document comprising of questions/statements which a respondent is supposed to answer voluntarily and randomly to avoid bias, (Bell, 2021). The questions can be open or close ended depending on the opinion of the researcher (Saunders, 2020). This researcher uses close-ended questions in the questionnaire in order to get uniform responses which are easier for data analysis. The advantage of using a questionnaire in this study was the ability of the questionnaire to obtain first-hand and specifically meant for the study. Close-ended questionnaires were also very useful in making data uniform for data analysis. The major

drawback from using questionnaire, especially close-ended questionnaires was their restrictive nature in the freedom of the respondent to express their opinion. The researcher circumvented this drawback by using a Likert-scale in the close-ended opinions in order to widen the range of responses. Justification is given for the use of a questionnaire because, it protects the privacy of an individual hence they can give information that is true and fair. Resources were scarce, however, by the use of a questionnaire findings that are statically significant were acquired, due to the objective and subjective nature of data from a wide sample of the research population.

3.6 Data collection procedure

The researcher went to the ZSE financial market department. Upon arrival, the researcher was assisted by the secretary of the finance department in distributing the research instruments. The researcher was called to return after a fortnight and record all the information that was given by respondents on an excel spreadsheet. The research instruments were not allowed to leave the company premises as they were deemed to be private and confidential.

3.7 Data analysis and presentation techniques

The data collected for the study was analysed using SPSS (version 20) and Microsoft Excel 2016. The study seeks to utilize quantitative data thus; the researcher codified the data in SPSS for statistical analysis and determination of relationships between the variables in the study. The attributes of the variables were coded as they were on the questionnaire. The researcher used regression, correlation and hypothesis testing as the key elements of the study. In addition to these, the researcher also used descriptive statistics to show the nature of the variables and their attributes. The presentation of information was done using Microsoft Excel, graphs, tables and charts were presented using Excel because of its superior graphic capacity to enhance visual clarity.

3.8 Ethical considerations

The researcher considered the following ethical issues during the study.

3.8.1 Anonymity

Anonymity is the protection of the respondent from any identification of any sort (Creswell, 2020). This helps to protect the freedom of the respondent and not to tie a respondent to an

expressed opinion. In obtaining the research data from respondents, anonymity was maintained from the respondents of the questionnaires.

3.8.2 Confidentiality

Confidentiality refers to the ability of the researcher to maintain secrecy and information security of whatever communication transpiring between the researcher and the respondent (Bell, 2021). Confidentiality was maintained in handling and processing the responses from the research subjects. The questionnaires were not allowed to leave the company premises, therefore were kept in a lockable facility and the location is unknown.

3.9 Reliability and validity

3.9.1 Reliability

The reliability of the study was measured using the Cronbach's Alpha. The reliability of the study involves ensuring that the test values are consistent, and Cronbach's alpha was employed in the calculations to determine this. It was introduced by Cronbach in 1951, a finding that produces a correlation of 0.9 is therefore highly favourable, whilst 0.5 is unsatisfactory.

Reliability testing: The Cronbach Alpha.

This study used a pilot study in order to determine the reliability of the study through a Cronbach's alpha testing.

Table 3.1*: Cronbach's Alpha test for reliability*

Cronbach's Alpha	**N of Items**
.906	25

The study found a Cronbach's Alpha of 0.906 from the tests conducted using a pilot study of 10 experts. The experts were handed the questionnaire and they answered them completely. The researcher found that this Cronbach's Alpha is acceptable for a reliable questionnaire. Saunders (2020) reassures that an Alpha of 0.9 is very good. Previous studies have found their Alphas from 0.7 – 0.9 (Gherghina, 2021; Baker, 2020). Therefore, the questionnaire qualifies as reliable for the satisfaction of the research variables.

3.9.2 Validity

The validity of the study was measured using the heteroscedasticity test in testing the normality of the respondents. The heteroscedasticity test was first conducted by Pagan in 1979, to test whether the variance of errors from a regression is dependent on the values of the independent variables.

3.9.3 Homoscedasticity test for equality of variance

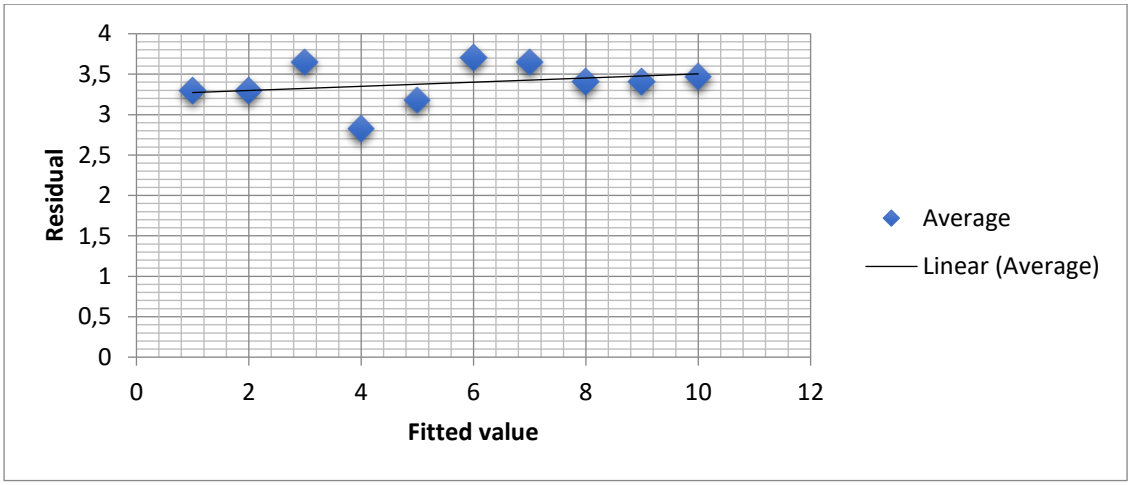


***Fig 3**: Homoscedasticity test*

The data was found to be homoscedastic with an equality of variance. As shown in the above table, this indicates that there was no bias in the responses of the research instruments. There was a balance in the nature and extent of the responses and thus the structuring of the research instrument did not provide room for bias.

3.10 Chapter summary

The chapter gave a deep insight of the research methodology used to carry out the study. The research design, population sampling, data sources, data instruments, research instruments, data collection procedures and data reliability and validity as well as ethical considerations were covered in this chapter. The main focus of the next chapter will be on data presentation and analysis where results for this research question will be shown

CHAPTER IV

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.0 Introduction

This chapter seeks to present the findings from the respondents. The presented findings will be followed by an analysis and immediate discussion comparing previous studies which were evaluated in chapter 2, to the findings of this study. The chapter is organised in such a way that it addresses all the research questions in the study.

4.1 Demographic data analysis

4.1.1 Response rate

The table below shows the response rate of the population.

Table 4.1: Response rate

	Issued	**Returned**	**Percentage**
Questionnaires	72	60	83%

From the above table 4.1, it can be seen that 83% of the participants responded to the questionnaire. This gave the researcher credible data which is adequate to continue with the study. Creswell (2020) urges researchers to proceed with a study if the response rate surpasses 50%.

4.1.2 Gender

The figure below shows the composition of the gender among the respondents:

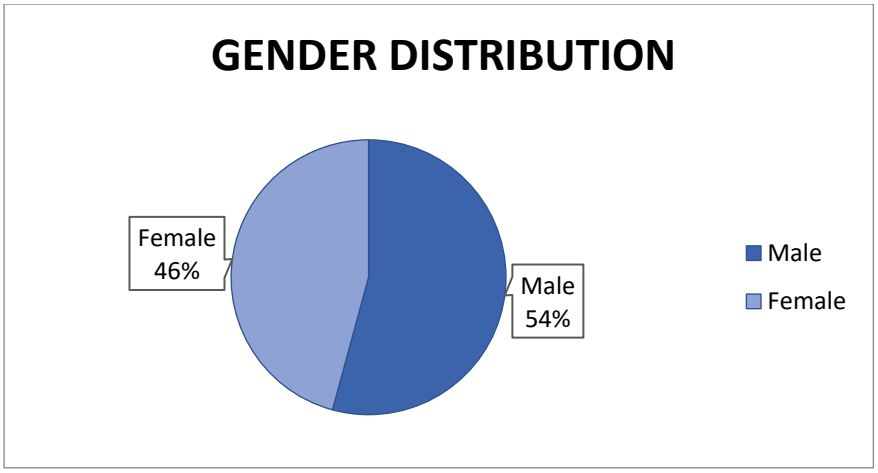
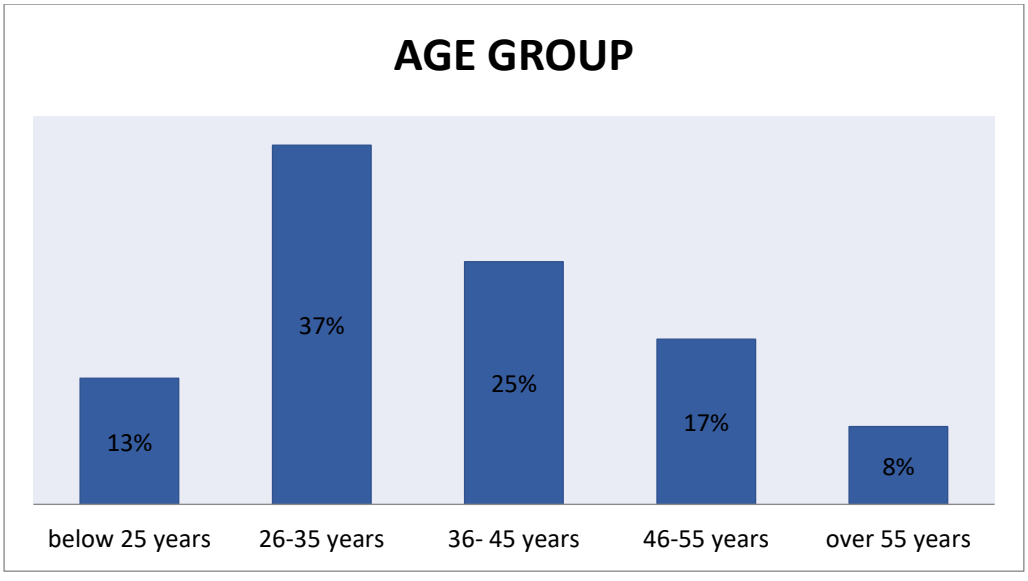


Fig 4.1 Gender distribution

The figure 4.1 above shows the distribution of genders in the study. There were 54% male and 46% female respondents. This shows the distribution of employees within the organisation which was being studied, as it has more male employees than female employees. The distribution is not very different to the extent that the gender can play a role in biasing the response. Saunders (2020) propounded that a ratio of 60/40% is alright for gender distribution and this study's findings are within this bound. Thus, the study is free from gender-based bias of information.

4.1.3 Age group

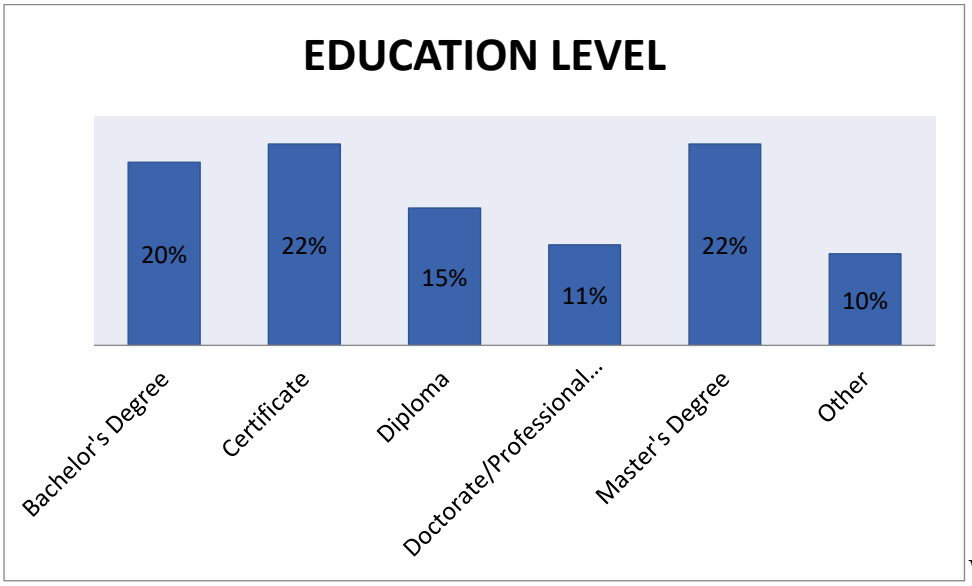


Where N=60

Fig 4.2 Age distribution of respondents

The above chart shows the age distribution of the respondents. The majority of the respondents lie in the age group of 26-45 years, which constitutes of 62% of the total respondents. This shows that the majority of the respondents are within the economically active age-range. This is a reflection of the status quo in the industry where many of the employees are in their economically active stages. Thus, this study's findings can be generalized to other similar organisations because it shows the views of the majority of the economically active employees.

4.1.4 Education level

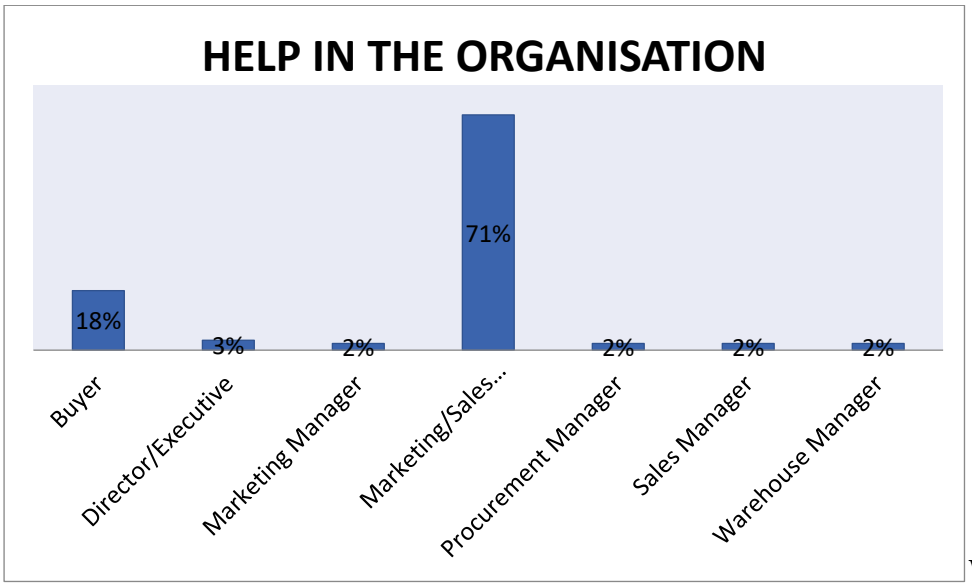


Where N=60

Fig 4.3 Educational level of respondents

The above fig 4.3 shows that the entire sample has a certificate or better in terms of educational qualification. This indicates that all respondents understood the English language in the questionnaire and thus the responses obtained are free from uneducated guess-work in answering.

4.1.5 Help in the organisation

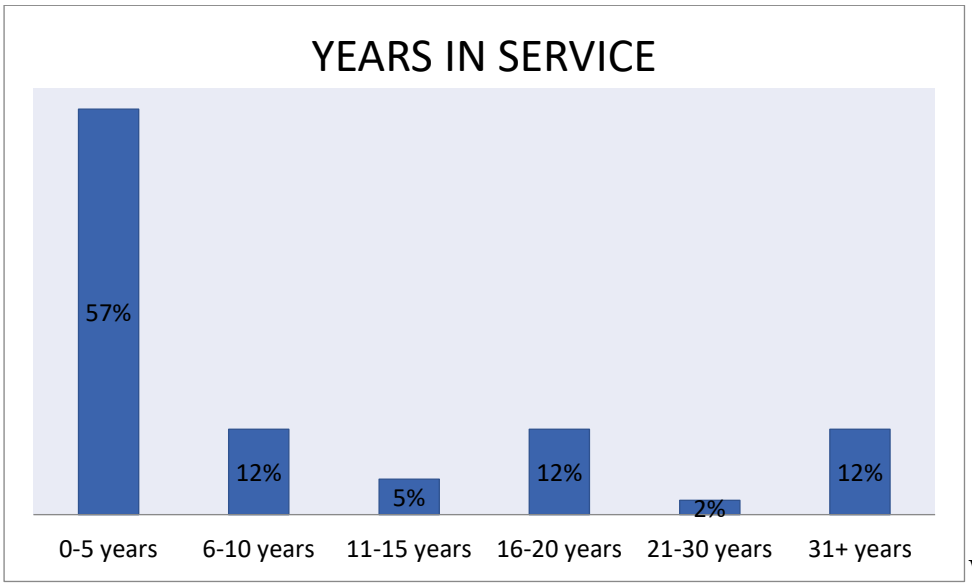


Where N= 60

Fig 4.4 Help in the organisation

Fig 4.4 shows the distribution of positions within the organisation from which the study was conducted. The results show that there is a majority of the lower-level employees, 71% marketing/sales personnel and 18% buyers, as is the norm in most organisations (Baker, 2020). The researcher was able to obtain a mix of responses including management level responses which helped to create randomness in the responses which was crucial in relieving the information from bias.

4.1.6 Years in service



Where N=60

Fig 4.5 Years in service

The above figure 4.5 shows that the majority of the respondents constitute of 74% and are of 0 to 15 years of experience at the ZSE market. This is a reflection of the situation in industry as well (Endri, 2021). The respondents have had some significant time in the organisation and as such are able to provide answers based on a vast period of experience which makes their responses the more accurate.

4.2 The types of Covid-19 restrictions that were imposed on the financial markets

The following information refers to the descriptive statistics of the information gathered on the research instrument. The researcher shows the measures of central tendency and the measures of dispersion which were deemed necessary for this study. The descriptive statistics below refer to the Covid-19 restrictions that were imposed on the financial markets, which address the first research questions, which stated that: “What are the types of Covid-19 restrictions that were imposed on the financial markets?”

Table 4.3 Covid-19 restrictions that were imposed on the financial markets

Descriptive Statistics											
	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Lockdowns were a result of covid-19	60	3.00	2.00	5.00	3.3000	1.06246	1.129	.240	.309	-1.159	.608
The industry decongestion policy came as a result of covid-19	60	3.00	2.00	5.00	3.4500	1.14129	1.303	.021	.309	-1.412	.608
The prevention requirements of social distancing and protective clothing were a result of covid-19	60	3.00	2.00	5.00	3.1500	1.16190	1.350	.435	.309	-1.317	.608
The travel restrictions and restrictions in the movement of stocks were a result of covid-19	60	3.00	2.00	5.00	3.3667	1.19273	1.423	.173	.309	-1.502	.608
The curfew imposed on society and industry was a result of covid-19.	60	3.00	2.00	5.00	3.6833	1.22808	1.508	-.270	.309	-1.536	.608
Valid N (listwise)	60										

The above table 4.3 shows that the majority of the respondents were of the opinion that the lockdown, industry decongestion, curfew, and restrictive actions to prevent Covid-19 were all restrictions which came to be because of Covid-19.

Lockdowns have an average response of 3.3, industry decongestion has an average of 3.45, preventive measures have an average of 3.15, travel restrictions have an average of 3.37 and curfew has an average of 3.68. This means that the majority of the respondents agree that all the restrictions imposed were a result of the Covid-19 pandemic.

These findings are in agreement with the findings from Kusumahadi & Permana (2021), who also found that the Covid-19 brought along with it some restrictions, especially on the conduct of business which required social interaction. This shows that there is an agreement between the findings of this current study and the previous study.

In the study by Gherghina (2021) they also found that the key Covid-19 restrictions were travel bans, shutdown, decongesting industry and reduced operation time. This is in agreement as well with the current study.

4.3 The impact of travel bans on the performance of financial markets

The following information refers to the descriptive statistics of the information gathered on the research instrument. The researcher shows the measures of central tendency and the measures of dispersion which were deemed necessary for this study. The descriptive statistics below refer to the impact which the travel bans have had on the financial markets, which address the second research questions which stated that: "What is the impact of travel bans on the performance of financial markets?"

Table 4.4 *Impact of travel bans on the performance of financial markets*

Descriptive Statistics									
	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
The travel bans led to the reduction in the value of assets on the stock markets.	60	1.00	4.00	5.00	4.4500	.50169	.252	.206	.309
The travel banks led to the reduction in the value of assets on the commodities market	60	2	3	5	4.05	.872	.760	-.099	.309
The travel bans have led to the reduction in value of assets on the real estate market	60	3.00	2.00	5.00	3.4167	1.10916	1.230	.179	.309
The travel bans have led to the reduction in the value of assets on the forex market.	60	3.00	2.00	5.00	3.5667	1.18417	1.402	-.101	.309
Valid N (listwise)	60								

Table 4.4 above shows the responses from the questionnaire regarding the effect that travel bans have had on the particular finance markets. On average, the respondents strongly agreed that travel bans led to reduction in the value of assets on the stock markets and on the commodities markets with average responses of 4.45 and 4.05 respectively. This means on average the majority of the respondents strongly agreed with the notions. The respondents also agree that travel bans have negatively affected the real estate market and the forex market with averages of

3.4 and 3.6 respectively; indicating that the majority of the respondents agree with the notion that travels bans negatively affected the forex and real estate markets. The standard deviations of the variables are all below 1.5 which indicates that there is no great deviation from the mean in the responses.

Past studies by Yong (2021) and Endri (2021) have revealed that travel bans have negatively affected the performance of stock markets and stock price volatility respectively. Thus, the study agrees with the previous studies found.

In trying to investigate the research question further, the researcher went on to perform regression analysis and the results came out as shown in the table below:

Table 4.5 *Regression analysis on impact of travel bans on the performance of the financial markets.*

Model Summary[b]				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.193[a]	.730	-.633	.84639

a. Predictors: (Constant), tb004, tb002, tb003, tb001

\b. Dependent Variable: fp001

Table 4.6 *ANOVA on impact of travel bans on the performance of the financial markets.*

ANOVA[a]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.533	4	.383	2.535	.711[b]
	Residual	39.401	55	.716		
	Total	40.933	59			

a. Dependent Variable: fp001

b. Predictors: (Constant), tb004, tb002, tb003, tb001

From table 4.5 and table 4.6 above, the regression calculation can be seen for the variables Travel Bans and Performance of financial markets. The regression analysis carried out shows a

significant relationship between the two variables of 0.730 which is an indication of the existence of a strong relationship between the two variables. Therefore, this study found that there is a strong relationship between the struggling performance of the financial markets and the travel bans.

The researcher concluded that the relationship between travel bans and performance of financial markets can be modelled in the equation $Y_1 = aX + b$ where Y_1 is the independent variable travel bans, X is the dependent variable performance of financial markets, a is the correlation coefficient of X and b is the constant. The researcher found that the relationship between travel bans and performance of the financial markets can be modelled as $Y_1 = -0.730\ X + 1.32$. This relationship indicates that there is a 0.7 chance that travel bans will affect the performance of financial markets at any given time.

The ANOVA was used to test the hypothesis in the study and to determine whether to reject the null hypothesis. The hypothesis was crafted as follows:

H_0: There is no relationship between travel bans and performance of financial markets.

H_1: There is a negative relationship between the travel bans and performance of financial markets.

Table 4.6 above shows that the result from the ANOVA the F-value was found to be 2.535. This result indicates that there is a significant difference in the means of the variables. This implies that there are grounds to suggest that travel bans indeed have a negative impact on the performance of financial markets.

Thus, in conclusion the researcher rejected H_0 and adopted the alternate hypothesis and concluded that there is a negative relationship between travel bans and performance of financial markets. This conclusion is in agreement with the rest of the previous studies by Endri (2021) and Gherghina (2021) who came to the same conclusion in their independent studies. Thus, there is ground to believe that this study is in line with empirical evidence as was shown in Chapter 2 of the study.

4.5 The impact of total shutdown on the performance of financial markets

The following information refers to the descriptive statistics of the information gathered on the research instrument. The researcher shows the measures of central tendency and the measures of dispersion which were deemed necessary for this study. The descriptive statistics below refer to the impact which the total shut downs have had on the financial markets, which address the third research questions which stated that: "What is the impact of total shutdowns on the performance of financial markets?"

Table 4.7 *The impact of total shutdown on the performance of financial markets*

Descriptive Statistics									
	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
The total shutdown led to the reduction in the value of assets on the stock markets.	60	1.00	4.00	5.00	4.5500	.50169	.252	-.206	.309
The total shutdown led to the reduction in the value of assets on the commodities market	60	2.00	3.00	5.00	3.9333	.82064	.673	.126	.309
The total shutdown led to the reduction in value of assets on the real estate market	60	3.00	2.00	5.00	3.6000	.94241	.888	.141	.309
The total shutdown led to the reduction in the value of assets on the forex market.	60	3.00	2.00	5.00	3.5333	1.11183	1.236	-.048	.309
Valid N (listwise)	60								

The mean of how the total shutdown affected the stock markets, commodities market, real estate market and forex market were 4.55, 3.93, 3.6 and 3.53 respectively. This result indicates that there is a high rate of agreement from the research participants towards how the total shutdown led to reduction in the value of all the financial markets in this study. The standard deviations of the responses are minimal, indicating that there is a small variation in the responses, hence the means can be relied upon. Findings by Kusumahadi & Permana (2021) agree with the findings above and shows that there is a negative impact of Covid-19 on the financial markets,

particularly the total shutdown. Zhang (2020) also agrees with the findings in this study as he indicated that due to the total shutdown, there has been a loss in the value of commodities and stocks on the financial markets.

In trying to investigate the research question further, the researcher went on to perform regression analysis and the results came out as shown in the table below:

Table 4.8 *Regression analysis: The impact of total shutdown on the performance of the financial markets.*

Model Summary[b]				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.193[a]	.861	-.633	.84639

a. Predictors: (Constant), sd004, sd002, sd003, sd001

b. Dependent Variable: fp001

Table 4.9 *ANOVA on impact of total shutdown on the performance of the financial markets.*

ANOVA[a]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.533	4	.383	1.961	.711[b]
	Residual	39.401	55	.716		
	Total	40.933	59			

a. Dependent Variable: fp001

b. Predictors: (Constant), sd004, sd002, sd003, sd001

From table 4.8 and 4.9 above, the regression calculation can be seen for the variables Total shutdown and Performance of financial markets. The regression analysis carried out shows a significant relationship between the two variables of 0.861 which is an indication of the existence of a strong relationship between the two variables. Therefore, this study found that there is a strong relationship between the struggling performance of the financial markets and the total shutdown which was imposed by the pandemic.

The researcher concluded that the relationship between total shutdown and performance of financial markets can be modelled in the equation $Y_2 = aX + b$ where Y_2 is the independent variable total shutdown, X is the dependent variable performance of financial markets, a is the correlation coefficient of X and b is the constant. The researcher found that the relationship

between total shutdown and performance of the financial markets can be modelled as $Y_2 = -0.861 X + 1.46$. This relationship indicates that there is a 0.861 chance that total shutdown will affect the performance of financial markets at any given time.

The ANOVA was used to test the hypothesis in the study and to determine whether to reject the null hypothesis. The hypothesis was crafted as follows:

H_0: There is no relationship between total shutdown and performance of financial markets.

H_2: There is a negative relationship between the total shutdown and performance of financial markets.

Table 4.9 above shows that the result from the ANOVA the F-value was found to be 1.961. This result indicates that there is a significant difference in the means of the variables. This implies that there are grounds to suggest that total shutdowns indeed have a negative impact on the performance of financial markets.

Thus, in conclusion the researcher rejected H_0 and adopted the alternate hypothesis and concluded that there is a negative relationship between total shutdown and poor performance of financial markets. This conclusion is in agreement with the rest of the previous studies by Cho (2022) and Bonga (2021) who came to the same conclusion in their independent studies. Thus, there are grounds to believe that this study is in line with empirical evidence as was shown in Chapter 2 of the study.

4.6 The impact of decongesting of industries on the various financial markets

The following information refers to the descriptive statistics of the information gathered on the research instrument. The researcher shows the measures of central tendency and the measures of dispersion which were deemed necessary for this study. The descriptive statistics below refer to the impact of decongesting of industries on the financial markets, which address the fourth research questions which stated that: “What is the impact of decongesting of industries on the financial markets?”

Table 4.10 *The impact of decongesting industries on the various financial markets*

Descriptive Statistics									
	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
The decongesting of industry led to the reduction in the value of assets on the stock markets	60	1.00	4.00	5.00	4.3833	.49030	.240	.492	.309
The decongestion of industry led to the reduction in the value of assets on the commodities market	60	2.00	3.00	5.00	4.1500	.84020	.706	-.294	.309
The decongesting of industry led to the reduction in value of assets on the real estate market	60	3.00	2.00	5.00	3.5667	1.18417	1.402	.026	.309
The decongesting of industry led to the reduction in the value of assets on the forex market	60	3.00	2.00	5.00	3.2333	1.06352	1.131	.387	.309
Valid N (listwise)	60								

From the above table 4.10, the mean for the impact of decongesting industries on value of assets on stock market, commodities market, real estate market and the forex market were 4.38, 4.15, 3.57 and 3.23 respectively. The standard deviations are minimal indicating that the means can be relied upon in the above information. These results show that there is a strong impact which the decongesting of industries has had on the financial market. The majority of the respondents in the study are of the opinion that the decongesting of industries led to a reduced value of assets on the above financial markets. This is in agreement with past literature in the findings by Endri (2021) suggested that the decongesting of industries led to the market volatility of financial markets, indicating a downward performance and increase in insecurity among the traders.

In trying to investigate the problem further, the researcher went on to perform regression analysis and the results came out as shown in the table below:

Table 4.11 *Regression analysis: The impact of decongesting industry on the performance of the financial markets.*

Model Summary[b]				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.193[a]	.743	-.633	.84639

a. Predictors: (Constant), di004, di002, di003, di001

b. Dependent Variable: fp002

Table 4.12 *ANOVA on impact of decongesting industry on the performance of the financial markets.*

ANOVA[a]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.533	4	.383	1.535	.711[b]
	Residual	39.401	55	.716		
	Total	40.933	59			

a. Dependent Variable: fp001

b. Predictors: (Constant), di004, di002, di003, di001

From table 4.11 and table 4.12 above, the regression calculation can be seen for the variables Decongesting Industry and Performance of financial markets. The regression analysis carried out shows a significant relationship between the two variables of 0.743 which is an indication of the existence of a strong relationship between the two variables. Therefore, this study found that there is a strong relationship between the struggling performance of the financial markets and the decongesting of industry.

The researcher concluded that the relationship between decongesting industries and the performance of financial markets can be modelled in the equation $Y_3 = aX + b$ where Y_3 is the independent variable decongesting industries, X is the dependent variable performance of financial markets, a is the correlation coefficient of X and b is the constant. The researcher found that the relationship between decongesting industries and performance of the financial markets can be modelled as $Y_3 = -0.743\ X + 1.61$. This relationship indicates that there is a 0.743 chance that decongesting industries will affect the performance of financial markets at any given time.

The ANOVA was used to test the hypothesis in the study and to determine whether to reject the null hypothesis. The hypothesis was crafted as follows:

H_0: There is no relationship between decongesting industry and performance of financial markets.

H_2: There is a negative relationship between the decongesting of industry and performance of financial markets.

Table 4.12 above shows that the result from the ANOVA the F-value was found to be 1.535. This result indicates that there is a significant difference in the means of the variables. This implies that there are grounds to suggest that decongesting industries indeed has a negative impact on the performance of financial markets.

Thus, in conclusion the researcher rejected H_0 and adopted the alternate hypothesis and concluded that there is a negative relationship between decongesting industry and poor performance of financial markets. This conclusion is in agreement with the rest of the previous studies by Gherghina (2021) and Yong (2021) who came to the same conclusion in their independent studies. Thus, there are grounds to believe that this study is in line with empirical evidence as was shown in Chapter 2 of the study.

4.7 The impact of reduced operational time on the performance of financial markets

The following information refers to the descriptive statistics of the information gathered on the research instrument. The researcher shows the measures of central tendency and the measures of dispersion which were deemed necessary for this study. The descriptive statistics below refer to the Covid-19 restrictions on the financial markets, which address the first research questions which stated that: “What is the impact of reduced operational time on the performance of financial markets?”

Table 4.13 *The impact of reduced operational time on the performance of financial markets*

Descriptive Statistics									
	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
rot001	60	1.00	4.00	5.00	4.5167	.50394	.254	-.068	.309
rot002	60	2.00	3.00	5.00	4.1000	.79618	.634	-.183	.309
rot003	60	3.00	2.00	5.00	3.2833	1.04300	1.088	.140	.309
rot004	60	3.00	2.00	5.00	3.4000	1.13794	1.295	.148	.309
Valid N (listwise)	60								

The table 4.13 shows the mean for the impact of reduced operational time on value of assets on stock market, commodities market, real estate market and the forex market were 4.52, 4.1, 3.28 and 3.4 respectively. The standard deviations are minimal indicating that the means can be relied upon in the above information. These results show that there is a strong impact which the reduced operational time has had on the financial market. The majority of the respondents in the study are of the opinion that the reduced operational time led to a reduced value of assets on the above financial markets. This is in agreement with past literature in the findings by Yong (2021). Yong (2021) suggested that the reduced operational time led to the reduced capacity for most organisations which traded the financial instruments on financial markets and thus negatively impacted the value of the said financial instrument/ assets on the financial market.

In trying to investigate the problem further, the researcher went on to perform regression analysis and the results came out as shown in the table below:

Table 4.14 *Regression analysis: The impact of reduced operational time on the performance of the financial markets.*

Model Summary[b]				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.193[a]	.619	-.633	.84639

a. Predictors: (Constant), rt004, rt002, rt003, rt001

b. Dependent Variable: fp001

Table 4.15 *ANOVA on impact of reduced operational time on the performance of the financial markets.*

ANOVA[a]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.533	4	.383	1.442	.711[b]
	Residual	39.401	55	.716		
	Total	40.933	59			

a. Dependent Variable: fp001

b. Predictors: (Constant), rt004, rt002, rt003, rt001

From table 4.14 and 4.15 above, the regression calculation can be seen for the variables reduced operational time and Performance of financial markets. The regression analysis carried out shows a significant relationship between the two variables of 0.619 which is an indication of the existence of a strong relationship between the two variables. Therefore, this study found that there is a strong relationship between the struggling performance of the financial markets and the reduced operational time.

The researcher concluded that the relationship between reduced operational time and the performance of financial markets can be modelled in the equation $Y_4 = aX + b$ where Y_4 is the independent variable reduced operational time, X is the dependent variable performance of financial markets, a is the correlation coefficient of X and b is the constant. The researcher found that the relationship between reduced operational time and the performance of the financial markets can be modelled as $Y_4 = -0.619\ X + 1.41$. This relationship indicates that there is a 0.619 chance that reduced operational time will affect the performance of financial markets at any given time.

The ANOVA was used to test the hypothesis in the study and to determine whether to reject the null hypothesis. The hypothesis was crafted as follows:

H_0: There is no relationship between reduced operational time and performance of financial markets.

H_2: There is a negative relationship between the reduced operational time and performance of financial markets.

Table 4.15 above shows that the result from the ANOVA the F-value was found to be 1.442. This result indicates that there is a significant difference in the means of the variables. This implies that there are grounds to suggest that reduced operational time indeed has a negative impact on the performance of financial markets.

Thus, in conclusion the researcher rejected H_0 and adopted the alternate hypothesis and concluded that there is a negative relationship between reduced operational time and poor performance of financial markets. This conclusion is in agreement with the rest of the previous study by Gherghina (2021) who came to the same conclusion in their independent studies. Thus, there are grounds to believe that this study is in line with empirical evidence as was shown in Chapter 2 of the study.

4.8 Conclusion

This chapter focused on answering the research questions using the data obtained from the respondents of the study. The chapter sought to invoke statistical analysis into the inquiry for investigating a relationship between the main variables in the study which are impact of Covid-19 and performance of the financial markets. The following chapter shows the summary, conclusions and recommendations made by the researcher.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

5.1 Summary

The researcher found that the main types of Covid-19 restrictions on the financial markets can be categorized into four main factors. These were found to be the total lockdowns, the curfews, restrictions on travel, industry decongestion and the preventive measures taken to counter the impacts of Covid-19. This finding was in agreement with Kusumahadi & Permana (2021) who also found that the above mentioned were the main impacts which Covid-19 had on the financial markets in their study.

The researcher also found that travel bans have contributed negatively towards the performance of financial markets. The financial markets that the researcher focused on were the stock market, real estate market, commodities market and the forex market. This was in agreement with the findings by Kinsley (2020) and Endri (2021) who found that travel bans had negative impacts on the stock markets and on market volatility.

Furthermore, the researcher found that there is a negative relationship between the total shutdowns and the performance of the financial markets. This was in agreement with Endri (2021) and Zhang (2020) who found that the total shutdowns negatively affected businesses especially those in the financial markets sector.

The researcher found that there is a negative relationship between the decongesting of industry, which was done and the performance of the financial markets. The researcher also found that the reduced operational time had a negative impact on the financial markets. These findings agree with the studies by Yong (2021) and Gherghina (2021).

5.2 Conclusions

The researcher came to the following conclusions.

5.2.1 To determine the types of Covid-19 restrictions imposed on the financial markets.

The researcher concluded that the majority of the respondents agreed that travel bans, decongesting of industries, curfews, restrictive actions taken and lockdowns were the main types of the Covid-19 restrictions imposed on the financial markets

5.2.2 To determine the impact of travel bans on the performance of financial markets.

The researcher concluded that there is a negative relationship between travel bans on the performance of financial markets. In the hypothesis testing conducted by the researcher, the researcher rejected the null hypothesis and concluded that there is indeed a negative relationship between travel bans and the performance of the financial markets.

5.2.3 To determine the impact of total shutdown on the performance of financial markets.

The researcher concluded that there is a negative relationship between total shutdowns on the performance of financial markets. In the hypothesis testing conducted by the researcher through the use of ANOVA, the researcher rejected the null hypothesis and concluded that there is indeed a negative relationship between total shutdowns and the performance of the financial markets.

5.2.4 To determine the impact of decongesting of industries, on the performance of financial markets.

The researcher concluded that there is a negative relationship between decongesting industries and the performance of financial markets. In the ANOVA hypothesis testing conducted by the researcher, the researcher rejected the null hypothesis and concluded that there is indeed a negative relationship between decongesting industries and the performance of the financial markets.

5.2.5 To determine the impact of reduced operational time on the performance of financial markets.

The researcher concluded that there is a negative relationship between reduced operational time and the performance of financial markets. In the hypothesis testing conducted by the researcher with ANOVA, the researcher rejected the null hypothesis and concluded that there is indeed a negative relationship between reduced operational time and the performance of the financial markets.

5.3 Recommendations

The researcher came up with the following recommendations:

The researcher recommends that organisations should be on the lookout for the impact which are travel bans, decongesting of industry, reduced operational time and the measures taken to combat Covid-19 have had on the performance of the financial market at large.

The researcher recommends that the companies should seek to minimize the travelling that goes on in their value chain, if at all possible, they can outsource the travelling in order to circumvent the hustle which was dominating the industry during the peak Covid-19 periods. if possible, the organisations can choose to decentralize power in order to be able to fully function in separate structures which will need less travelling for logistical reasons.

The researcher recommends that companies should explore the use of online methods for transacting in order to circumvent the reduced operational times and the decongesting of industries which was being done in the Covid-19 era. There are advantages attached to the use of these methods, which accrue, including cost cutting in other cost centres of the organisations.

5.4 Areas for further study

The researcher urges future researcher to focus more on broader implications of Covid-19, not only on the performance, but also on the operational efficiency and overall organisation performance. The researcher urges future studies to expand the scope of the studies and focus more on the entire stock exchanges in Zimbabwe and all available financial markets in the country.

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APPENDICES

APPENDIX 1: QUESTIONNAIRE

INTRODUCTION

My name is Trish Tariro Njanike, an undergraduate degree student at Bindura University of Science Education, studying towards a degree in Banking and Finance. The requirements of the degree are that I undertake a dissertation as a research study, and this questionnaire is a vital tool in the study. You have been chosen to take part in the study by responding to this questionnaire. My research is on understanding the impact of covid-19 pandemic on the performance of financial markets in Zimbabwe, using a case of the Zimbabwe Stock Exchange.

In that light, please know that your name is not required on this questionnaire or any information that can lead to your identification. Also note, this information is strictly for academic purposes and will be handled with utmost confidence.

INSTRUCTIONS

Tick in the box which agrees most with your opinion. The responses are guided by the options below:

SD=STRONGLY DISAGREE, D=DISAGREE, N=NEUTRAL, A=AGREE, SA=STRONGLY AGREE

SECTION A: DEMOGRAPHIC INFORMATION

1.Gender

Male ☐ Female ☐

2. Age Range

24 & below: ☐ 25 – 35: ☐ 36 – 46: ☐

47 – 57: ☐ 58 +: ☐

3. Help in the organisation

Director / Executive: ☐ Marketing Manager: ☐ Sales Manager: ☐

Marketing / Sales Representative: ☐ Procurement Manager: ☐ Buyer: ☐

Warehouse Manager: ☐

Other Post specify: …….

4. Educational Level

Certificate: ☐ Diploma: ☐ Bachelor's Degree: ☐

Masters: ☐ Doctorate/ Professional qualification: ☐

Specify any other qualification: ……

5. Years of Service in the Organisation

0 – 5 years: ☐ 6 – 10 years: ☐ 11 – 15 years: ☐

16 – 20 years: ☐ 21 – 30 years: ☐ 31 years +: ☐

SECTION B: COVID-19 RESTRICTIONS ON FINANCIAL MARKETS

Please tick the box which corresponds the most with your opinion:

Your responses should follow the key below:

SD=STRONGLY DISAGREE, D=DISAGREE, N=NEUTRAL, A=AGREE, SA=STRONGLY AGREE

The following questions/phrases/statements indicate the feelings towards the covid-19 restrictions which were imposed in the financial markets.

CODE	STATEMENT/PHRASE	SD	D	N	A	SA
CORE001	1. Lockdowns were a result of covid-19					
CORE002	2. The industry decongestion policy came as a result of covid-19					
CORE003	3. The prevention requirements of social distancing and protective clothing were a result of covid-19					
CORE004	4. The travel restrictions and restrictions in the					

	movement of stocks were a result of covid-19					
CORE005	5. The curfew imposed on society and industry was a result of covid-19.					

SECTION C: TRAVEL BANS IMPACT ON FINANCIAL MARKETS

CODE	STATEMENT/PHRASE	SD	D	N	A	SA
TB001	1. The travel bans led to the reduction in the value of assets on the stock markets.					
TB002	2. The travel banks led to the reduction in the value of assets on the commodities market					
TB003	3. The travel bans have led to the reduction in value of assets on the real estate market					
TB004	4. The travel bans have led to the reduction in the value of assets on the forex market.					

SECTION D: TOTAL SHUTDOWN IMPACT ON FINANCIAL MARKETS

CODE	STATEMENT/PHRASE	SD	D	N	A	SA
SD001	1. The total shutdown led to the reduction in the value of assets on the stock markets.					
SD002	2. The total shutdown led to the reduction in the value of assets on the commodities market					
SD003	3. The total shutdown led to the reduction in value of assets on the real estate market					
SD004	4. The total shutdown led to the reduction in the value of assets on the forex market.					

SECTION E: DECONGESTING INDUSTRY IMPACT ON FINANCIAL MARKETS

CODE	STATEMENT/PHRASE	SD	D	N	A	SA
DI001	1. The decongesting of industry led to the reduction in the value of assets on the stock markets.					
DI002	2. The decongestion of industry led to the reduction in the value of assets on the commodities market					
DI003	3. The decongesting of industry led to the reduction in value of assets on the real estate market					
DI004	4. The decongesting of industry led to the reduction in the value of assets on the forex market.					

SECTION F: REDUCED OPERATIONAL TIME IMPACT ON FINANCIAL MARKETS

CODE	STATEMENT/PHRASE	SD	D	N	A	SA
ROT001	1. The reduced operational time led to the reduction in the value of assets on the stock markets.					
ROT002	2. The reduced operational time led to the reduction in the value of assets on the commodities market					
ROT003	3. The reduced operational time led to the reduction in value of assets on the real estate market					
ROT004	4. The reduced operational time led to the reduction in the value of assets on the forex market.					

SECTION G: PERFORMANCE OF FINANCIAL MARKETS DURING COVID-19 ERA

CODE	STATEMENT/PHRASE	SD	D	N	A	SA
FP001	The performance of financial markets significantly dropped because of the covid-19 pandemic in the assets on the stock market					
FP002	The performance of financial markets significantly dropped because of the covid-19 pandemic in the assets on the commodities market					
FP003	The performance of financial markets significantly dropped because of the covid-19 pandemic in the assets on the real estate market					
FP004	The performance of financial markets significantly dropped because of the covid-19 pandemic in the assets on the forex market					

END OF QUESTIONNAIRE

THANK YOU FOR YOUR TIME!!!