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THE EFFECTS OF COVID-19 ON PERFORMANCE OF COMMERCIAL REAL ESTATE: A CASE STUDY OF REAL ESTATE LISTED COMPANIES IN ZIMBABWE

By

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DEDICATION

To my son, Mason, my source of strength and happiness.

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Firstly, I thank God for granting me the opportunity to undertake this course and pull through to this stage.

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ABSTRACT

The purpose of the study was to explore and seek an understanding of the underlying factors leading to performance in the real estate sector remaining resilient in the midst of a global crisis when the global trend indicated negative growth in terms of rental income, collection and occupancy rate. The research adopted the phenomenologist and interpretivist research philosophy, and exploratory and descriptive research design, as such made use of a qualitative approach and a case study research strategy to get an in-depth understanding about the problem and therefore focused on real estate companies listed on the Zimbabwe Stock Exchange. The study established that during the COVID-19 outbreak the Zimbabwe commercial real estate sector registered a positive net effect in the retail, office, industrial and health sector in terms of rental income, collection and occupancy rate. Portfolio structure, demand and supply fundamentals, internal processes and systems, period of the lockdown, type of business, and category of the sector into essential and non-essential were among the factors that contributed to the resilient performance experienced in the commercial real estate sector. Portfolios that were diversified did not experience dire consequences as one asset class offset the exposure of another. The study puts forward the notion that the effects of crises can be uneven and vary from one sector to another and also from one country to another. These differential effects can in some instances result in a positive net effect on performance of economic sectors. The study recommends that government implement policies that would support sustained growth of the sector and assist the sectors that have been severely affected by the pandemic. These include tax deferrals to the sector during Level 5 lockdown and tax reliefs or holidays for adversely affected sectors such as the hotel industry.

Key words: COVID-19, crisis, occupancy rate, rental income, rental collection rate

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ABBREVIATIONS AND ACRONYMS

WHO:	World Health Organisation
OECD:	Organisation for Economic Cooperation and Development
UNCTAD:	United Nations Conference on Trade and Development
GDP:	Gross Domestic Product
GFC:	Global Financial Crisis
CBD:	Central Business District
KEPSA	Kenya Private Sector Alliance
ZWL	Zimbabwean Dollars
FMP:	First Mutual Properties
ZPI:	Zimre Property Investments
Mash:	Mashonaland Holdings
Dawn:	Dawn Property Consultancy
VAT:	Value Added Tax

CHAPTER ONE: INTRODUCTION

1.0 Introduction

The global economy since time immemorial has experienced several crises that have had both economic and humanitarian effects. Economic crises such as the Great Depression of the 1930s (Duhigg, 2008 and Cochrane, 2011), the Asian crisis of the late 1990s, (Pempel, 1999), and the 2008 Global Financial and Economic Crisis severely affected economic performance of many countries worldwide while on the other hand pandemics, that fall under the category of humanitarian crises such as the Plague of Justinian, New World Smallpox outbreak , Spanish Flu of 1918-1919, the HIV and AIDS virus which claimed an estimated average of 50 million lives each, have had far more threatening consequences to human safety, its existence and economic growth, (World Economic Forum ,2020 in Brodeur et al. ,2020)

Recently, the world experienced a humanitarian crisis, as the COVID-19 virus spread like a wildfire across the globe recording 1.69 million deaths and 75.7 million confirmed cases from the period March 2020 to December 2020 (WHO, 2020). According to JLL Global Research Report (April, 2020), global economic growth came to a sudden halt from April to June 2020, reflecting a first global trimestral contraction from the 2008 Global Financial Crisis. The virus thrived from globalisation, hurling a health crisis into a worldwide economic shock (UNCTAD, 2020).

The COVID-19 pandemic has the potential to cause a global economic recession as it is not certain whether the virus can be contained successfully for the normal functioning of business operations (OECD, 2020). As such, any discussion on performance cannot go on without assessing the effects of crises on the global community and business performance.

The chapter outlines a background to the study, justification of the study, statement of the research problem, research objectives and questions, significance and scope of the study.

1.1 Background to the Study

1.1.1 Development of COVID-19

The unanticipated outbreak of Coronavirus disease in 2019 that was first recorded in Wuhan, China. (Hui et al, 2020). Walsh (2020) in his article commented that COVID-19 marks the return of a very old and familiar enemy. What started off as a local outbreak towards the end of 2019 in China became a global pandemic with far exceeding severe consequences triggering a global economic crisis (OECD, June 2020). Table 1.1.1 below provides a summary of the development of the pandemic from the time it started to the point it was declared a global pandemic.

Table 1.1.1 - COVID-19 timeline

Date	Event
4 January 2020	WHO reports cluster of pneumonia cases in Wuhan, Hubei, China
7 January 2020	WHO identifies COVID-19
11 January 2020	China announces first death from COVID-19
13 January 2020	First official case of COVID-19 reported outside in Thailand
17 January 2020	Authorities in the Nepal, France, Australia, Malaysia, Singapore, South Korea, Vietnam and Taiwan confirm cases
21 January 2020	First case of COVID-19 reported in the United States of America
22 January 2020	WHO finds evidence of human to human transmission from China
23 January 2020	China imposes lockdown in the cities of Wuhan, Xiantao and Chibi of the Hubei province
8 March 2020	Over 100 countries report COVID-19 cases, Italy imposes quarantine in Lombardy region
11 March 2020	WHO declares COVID-19 a pandemic
2 April 2020	Global cases of COVID-19 reach 1 million
15 April 2020	Global cases of COVID-19 reach 2 million
27 April 2020	Global cases of COVID-19 reach 3 million
21 May 2020	Global cases of COVID-19 surpass 5 million
31 December 2020	Global cases of COVID-19 surpass 7 million and number of deaths reaches 1.69 million

Source: *World Health Organisation (2020)*

In general, the effects of COVID-19 are anticipated to have the same consequences like those of the 2008 Global Financial Crisis that was characterised by reduced aggregate demand, production, employment, incomes, liquidity and credit (Ngowi, 2013). Chudik et al. (2020) argues that the pandemic has both demand and supply on a global scale. Chudik et al. (2020) further explains that the effects of the pandemic involve synchronised disruptions that affect both demand and supply. On the supply side, infections reduce the supply of labour and levels of production, while lockdowns will cause businesses to close affecting the supply chain. Correspondingly, the demand side is characterised by downsizing of employees and loss of income ultimately reducing the level of consumption of domestic consumption and firms' investment. To summarise its impact Gondwe (2020) confirms that the virus is associated with high socio-economic costs such that many countries are on the brink of facing a recession and economic downturn.

In response to the devastating effects of the pandemic, many countries imposed COVID induced lockdown restrictions, limiting movement and normal business operations. According to the United Nations (2020) the impact of COVID-19 has been catastrophic, characterised by increasing unemployment, reduced working hours that have led to a fall an estimated 23.3% decrease in working hours compared to 14% recorded in 2019. This decline in global working hours was equated to the loss of more than 400 million jobs and a 15% drop in income of developing nations.

Given the rapid spread of the coronavirus, countries adopted several public health measures to curb the spread and these were mainly characterised by national lockdowns Chali (2020) emphasises that the COVID-19 pandemic is different from past causes of recessions as quarantines and lockdowns that are essential to contain the virus, limit movement causing acute effects on sectors that rely on physical interactions such as tourism and hospitality, construction and real estate.

Zimbabwe first implemented its national lockdown in March 2020 under five levels. Level 5 in accordance to Statutory Instrument of 83 of 2020, allowed movement within a radius of five kilometres only. This meant that each individual would be confined to his or her home except when in need of food or medical supplies. Further only organisations in the essential services were allowed to operate meaning that other lines of trade not in the category of essential services were closed and not operating. Level 4 allowed for some businesses to resume subject to extreme precautions while Level 3 and 2 as highlighted in Statutory Instrument 99 of 2020 allowed for the reopening of formal businesses under stipulated strict trading hours and Level 1 being associated with normal activity. It is assumed that these different levels of lockdowns had differential effects on business activities. In support of this notion Balemi (2021) suggests that lockdown orders affect economic sectors differently.

Generally, health crises are said to have downstream effects on economic performance. Tanrıvermiş (2020) highlights that the pandemic is not only related to the health sector, but also brings up changes that affect all economic sectors and professions. World Economic Outlook April (2020) projected the global growth to be at –3.0 percent in 2020, a result far worse than the estimated 0.6% during the 2008-2009 Global Financial crisis as chances of recovery are slim. UNCATD (2020) estimated that COVID-19 would shrink GDP with a negative 4.3% and 1.4% for the global economy and Africa respectively, with smaller countries experience a reduction of up to 7.8%. According to Imara Zimbabwe 2020 Review and 2021 Outlook, GDP is forecast to have contracted by -4.1% while the International Monetary Fund estimated a higher decline of -10.4%.

Elile et al. (2019) argues that economic factors influence the real estate sector therefore its performance is dynamic owing to social, physical, economic, social, environmental and physical factors. Hong & Jeong, (2006) and Herbane (2013) stated that real estate companies were more vulnerable to crisis events due to spatial fixity, relatively weak market positions and higher dependence on other sectors. Conversely, Chudik et al. (2020) stated that empirical analysis of pandemics is challenging as one has to be in a position to clearly identify and attribute the effects of the pandemic and quantify the ambiguity associated with the forecasts. As such the effect of the pandemic cannot be accurately predicted. UNCTAD (2020) highlighted that the influence of COVID-19 on various economic sectors was uneven hence the need to investigate the effects of COVID-19 in Zimbabwe.

1.1.2 Commercial real estate performance preceding to the outbreak of COVID-19

According to the CBRE, Global Real Estate Sector Outlook, the year 2016 was characterised by moderate growth in commercial rents as the operating environment remained favourable for property investors. The annual growth of rentals for investment properties was estimated to be an overall 2.2% from 2016 across all sectors with office, retail, residential and industrial growing at an annual average of 6%,6.6%, 3.7% and 23% respectively. The performance of the sector from 2016 up until 2018 was backed by low inflation and interest rates that supported increased consumption. The global real estate sector from December 2018 through to December 2019 was characterised by healthy leasing fundamentals maintaining an average growth rate of 2% while in the retail sector, the growth of e-commerce made the market highly competitive (CBRE Global Outlook, 2019). At regional level, the sector had positive growth albeit at a slower rate due to restricted and limited availability of preferred investment stock (Africa Report, 2018).

In the Zimbabwean context, rentals continued to soften from the period 2016 to 2018. A sharp decline resulting in average decline of 3% was experienced in 2019 as the market reacted to Statutory Instrument 142 of 2019 that eroded rental revenues as a result of inflation induced by fluctuating exchange rates (First Mutual Properties Annual Report, 2019) while collection rate averaged between 70 to 80%. The retail sector managed to withstand the economic pressures and recorded high occupancy rates averaging above 90% (Mashonaland Holdings, 2019 Interim Report) while rentals remained relatively high compared to other sectors averaging between US$15 and US$20/sqm. Void rates remained in excess of 50% for office CBD while office parks recorded relatively high occupancy rates around 90%. Rentals in the office sector were averaging US$6-US$10 per square metre in the period 2018 and 2019 (Knight Frank Africa Report, 2019). Industrial properties on the other hand, recorded void rates in excess of 30% owing to low capacity utilisation in the productive sectors. The hotel sector was on an upward trend indicated by an increase in occupancy rate from 55% in 2018 to 61% in 2019.

1.2 Research Problem

The COVID-19 pandemic, had by December 2020 infected almost 7 million people in over 148 countries, resulting in more than 1.69 million deaths (WHO, 2020), with health experts suggesting that the pandemic still had the potential to reach 40-70% of the global population if left unchecked. While the pandemic has amplified the human social crisis, the crisis has already caused economic shocks, affecting both aggregate consumption and investment of most economies. These disruptions on production, that at first appeared localised, have now spread to supply chains across all firms in the world. Many businesses, notwithstanding the size were and still are faced with serious challenges, particularly the ones that are derived in demand such as real estate, tourism and hospitality industries, with a significant number of them facing a real threat of decline in revenue, insolvencies and job losses. While in the short run, pandemics are expected to severely affect economic activities (Brodeur et. al, 2020) all pointing to a significant negative impact on the local real estate in 2020, evidence on the performance of the ZSE listed property companies in terms of rental income, collection and occupancy rate suggests otherwise against all the odds (First Mutual Properties, 2020; Mashonaland Holdings, 2020 Annual Report; Zimre Property Investment, 2020; Dawn Properties, 2020).

First Mutual Properties declared a positive variance of 3% in rental collection rate and 5% in occupancy rate in 2020 compared to the same period in 2019 while Mashonaland Holdings recorded a 30% growth in rental revenues with occupancy rate increasing by 2.9%. Similarly, Zimre Property investments month-on-month collection rate averaged 100% from the period January to June 2020 compared to the same period in 2019 where it averaged 96%. The general expectation was that COVID-19 would inevitably trigger an almost instant negative performance on the real estate sector, at the very least in the short run. Positive performance was registered for subsectors within the Zimbabwean commercial real estate sector at least in the short run. It is because of the above-mentioned peculiarity that this study seeks to explore and understand the underlying causal factors leading to such disparities regarding why performance in the Zimbabwean context remained resilient when the global trend indicated negative growth in terms of rental income, collection and occupancy rate.

1.3 Research Objectives

1.3.1 Main objective

The study aims to explore and seek understanding on the underlying phenomena leading to performance in the Zimbabwean context remaining resilient when the global trend indicated negative growth in terms of rental income, collection and occupancy rate.

1.3.2 Specific research objectives

The following are the research objectives of the study:

i. to ascertain the effects of the COVID-19 pandemic on rental income and collection rate on the commercial real estate performance during the period March to December 2020.

ii. to ascertain the effects of the COVID-19 pandemic on occupancy rate on the commercial real estate performance during the period March to December 2020.

iii. to establish the causes of the changes in the rental income, occupancy and collection rate during the period March to December 2020.

1.4 Research Questions

1.4.1 Main question

Why did commercial real estate performance in the Zimbabwe remain resilient when the global trend indicated negative growth in terms of rental income, collection and occupancy rate?

1.4.2 Specific research questions

The research questions are as follows:

i. What were the effects of the COVID-19 pandemic on rental income and collection rate on the commercial real estate performance during the period March to December 2020?
ii. What were the effects of the COVID-19 pandemic on occupancy rate on the commercial real estate performance and during the period March to December 2020?
iii. What were the causes of changes in the rental income, collection and occupancy rate during the period March to December 2020?

1.5 Research Proposition

The COVID-19 pandemic increased rental income, collection and occupancy rate of commercial real estate in Zimbabwe during the period March to December 2020.

1.6 Significance of the Study

The study will benefit real estate practitioners in listed companies to understand the effects of global crises and in particular those with humanitarian effects on the performance of commercial real estate. The findings of the study will help them formulate policies and strategies that can be documented and adopted to ensure sustained performance in case of other outbreaks of pandemics.

The research will further provide stakeholders such as investors with valuable empirical evidence on the performance of real estate in Zimbabwe under COVID-19. The findings can be used by the government in crafting policies that can support growth of the sector and protect it from future crises. The empirical evidence on the performance of commercial real estate in Zimbabwe can benefit other scholars in future research on the topic.

1.7 Scope of Research

The research confined itself to the effects of COVID -19 on the performance of commercial real estate in Zimbabwe. Consistently, performance was limited to occupancy and rental income and collection rate that are also the key or major indicators of performance of real estate properties. They capture the overall performance of real estate investments and therefore are good indicators.

The study focused on companies in the real estate sector listed on the Zimbabwe Stock Exchange that represent a significant market share in the real estate sector. In this case, there are only four real estate companies on the Zimbabwe Stock Exchange that is Dawn Properties, Zimre Property Investments, Mashonaland Holdings and First Mutual Properties. Further the choice of population was based on the availability of data and time constraints on the part of the researcher. Further the research only covered the period March 2020- December 2020 that is from the time Zimbabwe recorded its first case of COVID-19 and instituted various measures to curb the disease.

1.8 Dissertation Outline

The document is structured into five (5) chapters.

Chapter 1: It essentially introduces the whole research and presents a compelling case of undertaking the study. It presents the background of the study, scope, justification of study, research objectives and questions.

Chapter 2: This chapter critically reviews literature on the effects of COVID-19 on the performance of commercial real estate. It reviews literature in line with the thematic topics arising from the study objectives. It is the basis of the study and identifies the gaps in literature about the topic.

Chapter 3: This Chapter will give an understanding on how the study was carried out by outlining the procedure and methods adopted in the investigation of the problem and collection of data. It will present the research methodology, research philosophy, sampling methods, data collected and methods of data presentation to be presented in Chapter 4.

Chapter 4: Chapter 4 will present and analyse research findings collected around the research objectives. It will utilise various techniques to present and summarise data collected that include tables, charts and graphs. It will give a detailed discussion of how the findings relate to literature**.**

Chapter 5: In this final Chapter, the study will be consolidated by linking the aim of the research, its objectives in Chapter 1, the literature reviewed in Chapter 2 and findings gathered from Chapter 4. It will present research conclusions and recommendations.

1.9 Chapter Summary

This Chapter provided an outline of the contents of the research. The purpose of the chapter was to give an overview of the study by articulating the background to the study, problem statement, study objectives, questions and justification of the study. The effects of COVID-19 were discussed in general to provide a foundation to the study. The next chapter will provide a comprehensive literature review around the effects of COVID-19 on the performance of the commercial real estate sector.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter presents a literature review and examines notable literature published pertaining to the effects of the COVID-19 pandemic on commercial property performance. This chapter will investigate the notion of crises and their implications in general and also define the research key variables that are COVID-19, occupancy and rental income and collection rate.

The research uses various sources pertaining to the subject area highlighting the underpinning theory, opinions, proposals and facts raised by different authors, linking these issues to the nature of the problem raised in the previous chapter. The chapter also analyses annual reports of local real estate companies and publications from research companies in the real estate sector to establish key thoughts around the topic under study.

The sources of information for this chapter are the published books on the subject areas, reviews and contribution through journals and papers, and the electronic material. Care has been taken to use internet material from established organisations and professionals. A list of the reference material and appendices are available at the end of this research document.

2.2 Definition of Key Terms

2.2.1 Crisis

In general, crises have negative consequences that can lead to failure of businesses to achieve their goals, diminish the market value and even threaten the going concern of the companies as they provide organisations little time to respond (Hermann, 1963; Penrose, 2000; Lerbinger, 2012). Rapport (1970) defines a crisis as an upset in a steady state while the United Nations International Strategy for Disaster Reduction (2016) views a crisis as a serious disturbance of the normal functioning of society or economic agents involving substantial economic and environmental losses beyond the country’s ability to cope using its own resources. Pierson and Thomas (2002) suggest that a crisis is precipitated by hazardous events that may be a single catastrophe or a series of mishaps and may be brought about by something external to the person or business.

2.2.2 COVID-19

When a disease breaks a barrier of normal prevalence in a geographical area, it is labelled as an epidemic, and if this disease spreads across international borders, it is then labelled a pandemic (Gunn, 2013; Porta, 2008). COVID-19 has been classified as a transboundary global pandemic thus falling into the category of humanitarian crises with catastrophic effects on both human health and economic wellbeing. A transboundary crisis is defined in the context of a geographical boundaries (Keller, 2010).

The first case of the COVID-19 pandemic was documented in China in 2019. COVID-19 is a highly contagious disease that was triggered by a newly discovered coronavirus as it is genetically related to the coronavirus responsible for the SARS outbreak of 2003. WHO (2020), first announced COVID-19 on the 11th of February 2020 as a respiratory disease with symptoms such as fever, cough and myalgia. According to Zhu et al. (2020), the WHO labelled the disease as an emerging respiratory disease different and far worse than the MERS-CoV-2 and SARS-Cov. The pandemic spread across the globe, registering 1.69 million deaths and 75.7 million confirmed cases from the period March 2020 to December 2020 (WHO, 2020). The disease was also reported to be mutating signalling that it was far from over. In this study COVID-19 shall therefore refer to the disease that has caused disruptions and uncertainty on a global, sector and business level.

2.2.3 Real estate

Real estate is a place where real activities take place (Iman, 2002). Real estate is unique because of its fixity. Jowsey (2011: 39) in Zhanda (2020) describe real estate as land and anything permanently affixed to it such as buildings while International Valuation Council Glossary of Terms (2015), refers to real estate as land and all natural things on the land including improvements.

Real estate is generally organised by property where the key distinction is between residential and commercial property (Glickman, 2014). Iman (2002) classifies real estate into five groups referred to as agricultural, residential, commercial, and industrial and others, while Glickman (2014) classifies real estate into two broad categories comprising of residential and commercial where commercial property comprises of investment property that is used for business such as office, retail, industrial and specialised uses such as hospitals and hotel.

2.2.4 Performance

Performance is generally best described in the context of key performance indicators (KPI), where it is a measure used to assess the level of attainment of organisational objectives (Oxford dictionary). Real estate key performance indicators are hinged on three broad areas that are physical, functional and financial performance (Hussein, 2011). Physical performance relates to the quality of the space while functional performance involves efficient maintenance of the asset and lastly financial focuses on the return on investment (Kyle, 2001).

According to The Institute of Real Estate Management (2011), real estate investors expect income from their investment in the form of rentals where return on investment is measured by the level of rentals collected and the improvement of the property's capital value (Nanthakumaran et al., 2000). All these aspects fall under the category of financial performance that are functions of rental income, occupancy and rental collection rate. Financial performance thus relates to the yield of the building that is usually the annual rental expressed as a percentage of the property value.

While the researcher appreciates different opinions outlined in relation to performance from the various authors, the study will adopt performance in the context of rental income, building occupancy rate and rental collection rate that is the focus of this study.

2.2.4.1 Occupancy rate

Occupancy rate is the proportion of space leased to tenants of the available inventory that can be used (Glickman, 2014). In simple terms it is the ratio of space occupied expressed as a percentage of total built space available in a particular building. Occupancy and rent complement each other, as occupancy rate increases, rent rises thus forming the key inputs of setting the value of any given property. Occupancy rate is the converse of vacancy rate (void) such that a summation of the total space occupied and total space vacant gives the total space available in any building.

2.2.4.2 Rental income

Real estate can be classified into operational and investment where operational is held for own use while investment is meant to earn revenue and/ or for capital appreciation. A business is defined in the context of activities brought together for the purpose of providing a return to the investors in the form of dividends (IFRS 3 App A). The return on investment of real estate is realised in the form of rental income.

2.2.4.3 Rental collection rate

Real property is attractive because of its ability to produce income over a long period. Collection rate is calculated as the actual monthly rental received expressed as a percentage of expected rental stipulated in the lease agreement. The main aim is thus to maximise rental revenue and accomplishing this entails collecting and maintaining a high collection rate throughout the year. Baum and Crosby (1988) support this notion as they denote that a good investment is one that produces high levels of return in comparison to the price paid. Alexander and Muhlebach (2007:402) affirm that none of the activities is more important than rent collection, characterised by adequate and consistent income streams.

2.3 Underpinning Theories

2.3.1 Complexity Theory

The Complexity Theory evolved around the 20th century. The theory is basically concerned about understanding how systems develop, adapt and evolve (Sammut- Bonnici, 2015). Complexity theory from a general viewpoint is known as the study of “complex adaptive systems” (Schneider& Somers, 2006). (Mitchell, 2009) highlights, those who study complexity will in principle support the notion that a “complex system” is made up of many small systems networking with each other through various, random and recurrent feedback loops (Gilpin & Murphy, 2008).

The theory has been applied in various areas and it entails how organisations or firms adapt to intricate environmental settings and how they survive under uncertainty or conditions of ambiguity. Complexity theory partly explains how organised systems emerge out of chaotic situations (Battram, 2002). The theory has basic principles that are networks, self-organising and non-predictability.

2.3.1.1 Networks

The belief is that we live in networks, consequently the spread of the coronavirus was a result of the interconnectedness of people, businesses and economies. What is local is global (Siemens, Dawson and Eshleman, 2018), and the relationship between economic agents is reciprocal. Sanger and Giddings (2012) refers to these networks as “intertwingled” meaning that systems are linked to each other through multiple, reoccurring and irregular feedback loops. If these relationships exist then Lorenz (1963), articulates that small changes in a one system can result in large, non-predictable changes over a period of time, known as the “butterfly effect”. According to Sanger and Giddings (2012) when theorising complex systems there are three points to accentuate:

i. Effects of one system are as a result of a small change in another complex system over a certain period of time
ii. It is not feasible to forecast if a specific interference will lead to a predefined outcome; and
iii. The outcome at the end cannot be predicted.

The above points therefore lead directly to non-predictability.

2.3.1.2 Non-predictability

Mihata (1997) suggests that the behaviour of complex systems is often random therefore one cannot anticipate the future state of a system given knowledge of the initial conditions. Predicting the effects in the short-term may be feasible, for instance we can only forecast the how the weather will be minutes or hours ahead, but this difficult for a longer period for example years. (Sanger and Giddings, 2012). Not knowing the future is a distinguishing factor of complex systems. This suggests that organisations should not try to predict the effects of the COVID-19 pandemic on businesses as the forecasts made can only be provisional and not conclusive. These provisional measures adopted will then lead to the concept of self-organisation.

2.3.1.3 Self-organisation

The concept of self-organisation emerged during the years 1940s and 1950s. Self-organisation is viewed as the ability of a system to suddenly rearrange itself into various states of complexity (MacMillan, 2004). Self-organisation involves the processes whereby individual agents begin to restructure themselves and achieve tasks or activities (Siemens, Dawson and Eshleman, 2018). The result is a configuration that seems to have its own life that is capable of moving in harmony with the present crisis. Key features of self-organisation are:

i. It is not predetermined and thus takes place naturally.
ii. The fundamental entities are unaware of the process.
iii. There is no intentional or premeditated guidance of the process.

iv. The organisation can survive away from the equilibrium.

In summary, the theory argues that changes in a subsystem can affect another subsystem in their arrangement and these effects are unpredictable (Hammer et al, 2012). Lindberg and Schneider (2013) viewpoint on system connections is that a change could result in an organisation being different from other organisations or a sector being different from another such that one cannot meaningfully compare the subsystems.

2.3.2 The General Equilibrium Theory

The Theory was propounded in the late 19th Century by Leon Walras thus deriving its name Walras' Law. The theory is predominately based on the equilibrium model that states that excess supply in one market is matched by corresponding demand in another market ultimately balancing out, that is reaching an equilibrium point (Keogh- Brown et al, 2010). The theory views economic sectors as a whole rather than individual independent sub-economic sectors. The theory focuses on value chains and does not look at one economic sector in isolation. For example in health crises situations, excess supply of rental space is offset by a matching demand for medical facilities thus maintaining equilibrium rentals and occupancies at all times. Therefore after an economic shock prices in the long run will at all times restore to the equilibrium point. According to Keogh- Brown et al (2010), the General Equilibrium Model is a simple approach used to estimate direct and indirect impact of crises on macroeconomic fundamentals behaviours beyond the health sector. To consolidate the main proposition of the theory, the pre-dominate feature of the model is that the equilibrium point may be distorted when a crisis happens but will eventually be restored in the long term.

2.4 Empirical Review on the effects of Crises

Karlsen (2016) in his study undertook a qualitative comparative study of H1N1 influenza and Ebola as a transboundary crisis in Norway and Western Africa. In his study he presented the several evidence on the impact of the pandemics on economic performance and sectors within. Production of rice in Guinea, declined by 20%, coffee by 50 % and cocoa manufacturing by 33 % (UN, 2016, p. 26). Small to medium enterprises collapsed, markets shutdown, and farming activities were abandoned (UN, 2016, p. 26). Exports of fishery sector dropped by 40 %, while rubber exports experienced a similar decline in Liberia (UN, 2016, p. 27). International investors postponed new projects and, in some instances, even withdraw the funding, and as airlines grounded flights and foreign visitors altered their plans resulting in a sharp decline in hotel occupancies. The main tenants of the study are that the H1NI influenza in Norway was a main concern of the health sector and its effect on other sectors was differential depending on the development of the pandemic.

Qui (2017) in his comparative case study on the management of pandemics in China found out that pandemics threaten all aspects of the economic and social fabric with significant indirect costs on everything that contributes to the Gross Domestic Product. The author adopted a qualitative comparative case study approach adjusted to suit the Chinese context in reviewing the effects of COVID-19, SARS and H7N9. In summary the author highlighted that pandemics are characterised by high rates of occurrence spread beyond boundaries, they strongly hit tourism and its related industries, and hence restrict international and domestic travel, representing a serious threat on the real estate sector as well. Performance of sectors such as tourism have a direct effect on commercial real estate performance while the tourism, and hospitality sector is largely affected by global pandemics.

Barro et al. (2020) undertook a historical analysis on the impact of COVID-19 and estimated that, keeping all things constant, the death rate of 2.1% translated to 150 million deaths across the globe during the Spanish Influenza between 1918-1920 and when matched to 2020 world population of 7.5 billion. That being the case the 2.1% death rate thus corresponds to 6 % decline in GDP and 8 % fall in private consumption.

Allan et al (2020) undertook a quantitative study and indicated that COVID-19 pandemic exerted a negative impact on the Asia- Pacific commercial real estate sector. Where rentals in the region dropped by an average of 15% in the first half of 2020 while the retail sector experienced a decline of 30% showing the severity of the pandemic on performance of real estate assets. The author quantifies the effect of the pandemic on performance of the real estate in terms of occupancy and rental collection levels, highlighting that health crisis usually have a ripple effect on economic performance of assets outside the directly affected sector.

Gourinchas (2020) uses a qualitative approach to summarise the effect of crises on the economic activities by stating that present day economies are a complex web of interrelated businesses. Due to the very high degrees of linkages and specialization of productive activities, an interruption in the value chain will have a ripple effect on all other sectors including real estate. The main tenants of this research outlines how economic agents are connected, although performance of these sectors is normally evaluated independently, each sector thrives on another and that the relationship is somewhat reciprocal. Consequently economic shocks travel through many markets and indirectly affect performance of many sectors for the better or worse.

According to Carlsson-Szlezak et al. (2020a), the results of their qualitative research show that crises take place through three channels that adversely affect economic activities. Firstly, Carlsson-Szlezak et al. (2020a), argue that a prolonged length of the pandemic will reduce consumer confidence as they are wary about the long-term economic implication resulting in discretionary spending. Secondly, household wealth will fall, necessitating households to increase their savings and decrease spending. Lastly as pandemics keep production halted, it will undesirably impact supply chains leading to significant financial impact on sectors with derived demand. The above study confirms Gourichas (2020) assertion on the interconnected of various economic sectors and further cement the propositions of the Complexity theory that highlight that businesses do not operate in a vacuum hence what affects one sector also affects the next.

Keke et al. (2020) in his quantitative study claims that the Nigerian economy has been greatly affected by the outbreak of COVID-19 so much so that investors are very scared to invest in the real estate sector while KEPSA (2020) highlighted that 61% of businesses witnessed major disruptions being in the service sector including real estate.

In light of the above studies, it can be concluded that crises naturally have a negative effect on economic and business performance and as such negative growth of the key performance indicators can be registered in the short run. Business shocks have an ancillary effect that force business performance off the average levels. Therefore changes in macroeconomic variables have a substantial effect on the outcomes of the sector regardless of them being in separate markets. Economic shocks are unpredictable and usually have a ripple and lasting effect on sector performance fundamentals causing a recession on a global scale. This is in view of the fact that economic shocks are random and usually outside the scope of economic models.

2.5 Commercial Real Estate Sector Dynamics

Real estate is a derived demand as such, changing local fundamentals change property market fundamentals and ultimately its performance of properties (Ball, Lizieri, and MacGregor, 1998). There are various studies that show the relationship between real estate cycles and macroeconomic fundamentals. For example Baffoe-Bonnie (1998) show how interest and mortgage rates influence house prices, while Adams and Fuss (2010) explain the impact of economic activity, cost of construction materials and lending rates on property prices.

Nonetheless, the focus of the study is on the dynamics of commercial real estate where Rosen and Smith (1983) from the initial study done by Blank and Winnick (1953) explain the relationship between rent and vacancy, the main indicators of real estate performance. The authors elaborate how demand and supply factors have a strong bearing on arriving at the equilibrium rental. Hendershot et al (2002a) highlight that demand and supply variables have a direct effect on the vacancy rate and ultimately the rental of a particular property while McCartney (2010:11) suggests that to understand commercial property markets generally vacancy rates and rental returns are basic variables that capture both demand and supply conditions. Bronnen and Jennen (2009), support this notion and conclude that economic activity may result in a deviation from the equilibrium point in the long run. It can thus be concluded that commercial real estate is not only affected by its intrinsic factors such as location but rather other factors which constitute economic and market fundamentals have a strong bearing on the performance of these key indicators.

Real estate markets are based on the stock/flow model (Poterba, 1984). The amount of stock is equal to the existing space at a particular point except in cases where buildings are held off for strategic reasons such as repairs or redevelopment. The amount of rental required is determined by the level of demand for the space thus setting an equilibrium price or rental level. The demand for rental space is determined by business entities who require accommodation (Rosen, 1974).

Occupancy levels affect rental growth and are the major determinants of property income over the long-term (Mueller, 2000). Blank and Winnick (1953) in their research documented that the natural vacancy hypothesis that explained how a healthy property will have a vacancy level that ranges between 0 – 6% and further alluded that as the natural vacancy rate decreases more rent is generated, ceteris paribus.

Maintaining stability in property markets during crises is challenging and rental affordability does not improve in the wake of a crisis (UNDP, 2020). The challenges confronted in real estate are often situational and are affected by the context in that they operate (Taylor 2012:19).Kun (2007) notions that the national economy can have a driving or restrictive influence. Real estate is thus derived demand and mirrors performance of economic sectors along its value chain.

2.6 Implications of COVID-19 on Commercial Real Estate

Various topics have been discussed about the environment, sustainability and climate change, demographics and technology nonetheless no one was aware that the world in 2020 was going to encounter a pandemic (Savillas Research, 2020). Literature on the effect of pandemics on commercial real estate remains limited as the sector is characterised by private players and remains opaque. Nonetheless, several authors have documented the effects of past crises and presented various opinions.

D'Lima (2020) found no effect on real estate as a result of the lockdown order by central governments, while Barro et al (2020), in a qualitative study examined the impact of the Spanish Flu and concluded that GDP declined in the short term resulting in a decline in returns of stocks, treasury bills and real estate.

Keogh Brown et al (2010) quantitatively managed to prove that health pandemics which took place in the UK between 1957 and 1968 resulted in an average GDP loss of 1.97% as it was accompanied by restricted economic activity while Ambrius et al (2020) highlighted that the Cholera epidemic affected property prices and rentals in the affected areas even 10 years after the pandemic. With regards to the Severe Acute Respiratory Syndrome (SARS) in Asia, Chou et al. (2004) demonstrated that the service and manufacturing sector, were mostly affected with Taiwan losing 0.67%, China 0.20% and 1.56% being recorded in Hong Kong.

Milcheva (2020) used a risk factor to establish the relationship between the COVID-19 daily infection rate and asset return and concluded that all sectors within the real estate fraternity showed an average positive sensitivity coefficient of 0.6 with the health sector having the lowest coefficient of 0.6 and retail the highest at 1.2. Meanwhile Xie and Milcheva (2020) applied a "difference approach" to establish the relationship between COVID-19 and returns on real estate assets in Hong Kong and argued that there was a negative correlation. In support of this notion Balemi (2021) points out that hotels and retail properties have been hit significantly by the shutdowns in the commercial real estate sector as these buildings host businesses that have to close down entirely as they mostly provide in-person or have personal points of sale. Balemi, Fuss and Weigand (2021) buttressed this assertion and highlighted that the sector was characterised by vacant office buildings and empty shopping malls as a result of movement restrictions, severely impacting real estate revenues. Carlsson-Szlezak et al. (2020) state that the longer the pandemic and shutdown orders last, the more severe will liquidity and capital risk in real estate markets become as disruptions in macroeconomic supply and demand increase further.

Deloitte (2020) highlighted that the global real estate sector during the pandemic, witnessed liquidity pressures on both residential and commercial tenants resulting in deferring or ceasing contractual lease payments that then impacted rental revenues and investment performance. According to CBRE (2020), the impact on the office sector has been limited, however companies should adopt a cautious approach to expansion in the short-term. Gujral et al. (2020) highlighted that the shift towards densification and open plan layouts in office space may reverse sharply as companies would need to decompress workspaces and adopt new habits.

In support of this notion, Zhanda (2020) adopted the mixed methods approach and concluded that remote or home working has been seen as having the potential to disrupt the commercial real estate sector particularly the CBD than suburban in Zimbabwe as companies shift towards diverse location strategies to accommodate both working from home and office hubs.The author concludes that the COVID-19 has a negative effect on the performance of commercial real estate. Correspondingly, Savillas Research (2020) argues that many companies have been stretched to the limit and are even when the pandemic is over, obligated to maintain the new normal affecting the demand of large office spaces as more employees will continue to work from home. CBRE Research March, 2020 argues that in addition to the existing pressure as a result of the growth of e-commerce, the disruption caused by the pandemic would further accentuate the existing pressure on retail properties.

On one hand, Honey and Steenkamp (2020) raised an issue of considering lockdowns as “force majeure”, as they are inevitable and unavoidable thus affecting the proper functioning of businesses and subsequently their ability to fulfil lease obligations. That being the case, CBRE August 2020 research report suggests that while real estate yields had been marginally impacted in the near term, the long-term outlook remained positive. Karlsen (2016) confirms this notion and that in case it affected the commercial real estate sector, the mechanisms through that this took place and or the extent to that it affected the sector is not known either. The impact cannot be generalised hence the need to assess each sub sector within commercial real estate.

Grilli (2020) suggested that the impact on occupancy rate under COVID-19 would be gentle as compared to the 2008 Global Financial Crisis. The main reason being that there is high uncertainty in companies and therefore the short-term will be focused on modifying business operations and processes to suit the current environment and this would not involve space surrenders or space rationalisation. Further, because of the requirements to contain the virus that includes social distancing, space per employee is likely to increase as companies reduce densification and this will likely increase demand for office space in the near future. In a nutshell, having conclusive discussions of the impact of COVID-19, does not yield convincing facts as the virus has only been around for 12 months that is a short-term period.

2.7 Literature Synthesis and Conceptual Framework

2.7.1 Theoretical Framework

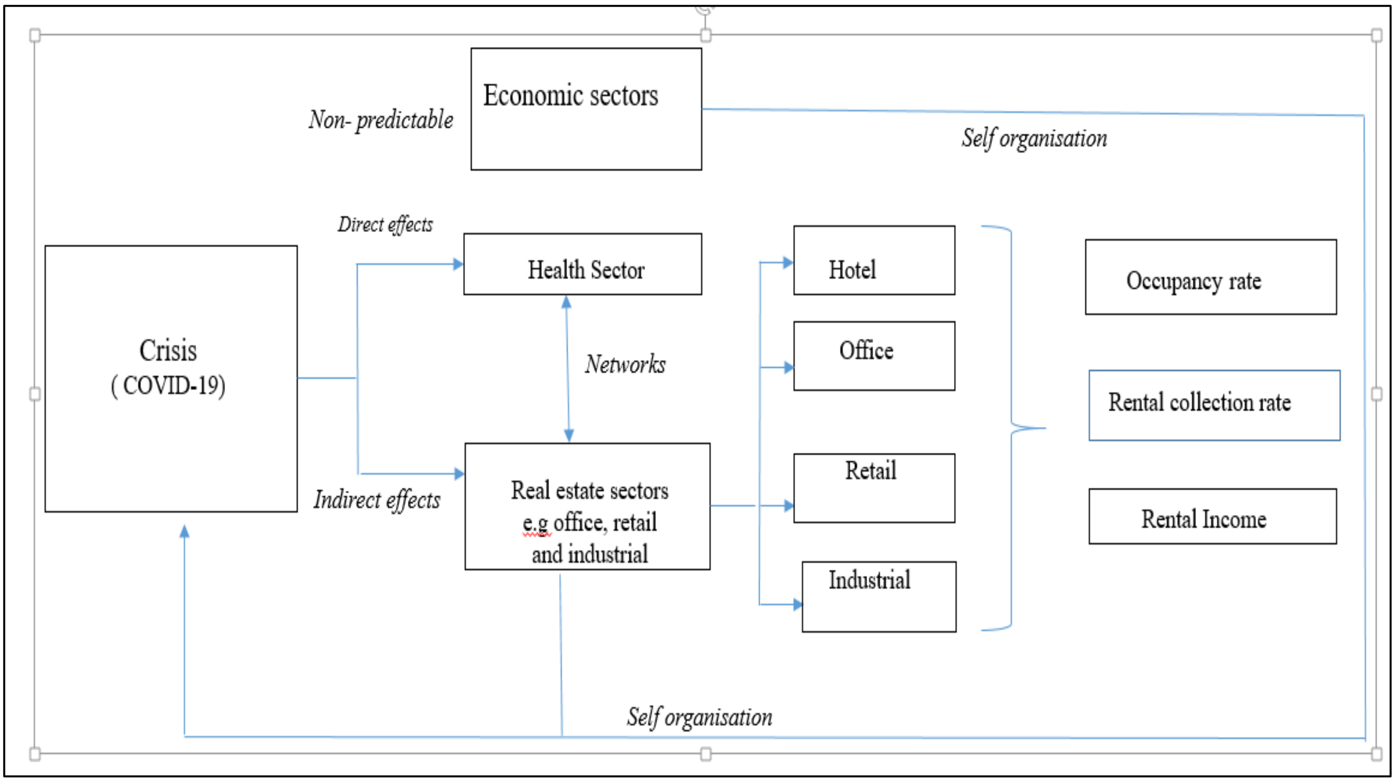
Studies show that generally crises have negative effects on performance of economic activities and consequently commercial real estate. The spread of COVID-19 as a transboundary crisis will result in a sizeable slowdown of economic activities thus affecting commercial real estate as sectors are interrelated and rely on each other. The basic tenets of the Complexity Theory thus state that economic sectors and businesses are interlinked such that business relationships are intertwined and reciprocal to an extent that a small change in one sector has ripple effects to another. These effects will manifest in both the short and long-term. The General Equilibrium Theory on the other hand articulates that, a crisis may cause a distortion of the equilibrium point in the short run.

2.7.2 Conceptual Framework

The conceptual framework shows the relationship between research key variables. The framework includes the effects of the pandemic on commercial real estate in terms of occupancy, rental income and collection rate within the context of the underpinning theory that is the Complexity theory. The main purpose is to establish linkages between the COVID-19, economic sectors and performance of the real estate sector in the midst of a global crisis. The study will look at COVID-19 as the main independent variable and its influence on the real estate key performance indicators that is occupancy rate and rental collection rate. The research thus primarily aims to establish the effects relationship of the COVID-19 pandemic on the real assets within the real estate sector.

The effects can be direct or indirect but the main element is that they are non-predictable, therefore the effects of COVID-19 on occupancy and rental income and collection cannot be conclusive. Nevertheless, all economic crises have unique features but they have happened and have some same features that can be used to guide for future outbreaks (Grilli, 2020).This then leads to businesses adopting provisional measures to adapt to the new external environment, forming a new equilibrium point. This configuration happens spontaneously resulting in self-organisation, such that an organisation is able to survive away from its state of equilibrium. Economic agents in the commercial real estate sector will self-organise as they respond to the new environment during the COVID-19 pandemic thus restoring the equilibrium point.

Figure 2.7.2 Conceptual framework



Source: Own Construct (2021)

2.8 Chapter Conclusion

The Chapter looked into effects of COVID-19 on commercial real estate performance in the context of occupancy, rental income and collection rate. In addition, to that, this chapter of the study also pointed out the Complexity theory as underpinning the study describing the underlying phenomenon. Chapter two on literature review will be followed by the research methodology chapter, then research findings chapter and finally the conclusion and recommendations chapter arising from the literature review and research findings.

CHAPTER THREE: RESEARCH METHODOLOGY

3.0 Introduction

Chapter one outlined the background of the research, while Chapter two on the literature review section looked into the available literature and sources for the subject area of the effects of COVID-19 on office and retail properties in Zimbabwe.

This chapter outlines, the procedures and techniques used to collect data, the research design, research tools, sample size and techniques used in sampling. The researcher explained the types of data used in this study and their sources, data analysis and data presentation and the research instruments. The research proposed use of qualitative techniques for collection, interpretation and analysis of data collected. According to Webster (1985), to research is to search or investigate exhaustively.

3.1 Recap of Research

COVID-19 has wreaked havoc across many economies causing an estimated -3% contraction in GDP as highlighted by the World Economic Outlook (2020). The disease has spread across all continents causing both a humanitarian and economic crisis because of the resultant recurring lockdowns that are unique and unprecedented. The effects of the COVID-19 can be likened to the 2008 Global Financial Crisis and in the advent of a crisis, economic sectors usually record slow to negative growth rates. Nevertheless, performance of real estate companies listed on the Zimbabwe Stock Exchange actually improved contrary to projections made on a global scale. The research therefore intended to explore why the Zimbabwean commercial real estate sector performance remained resilient in terms of occupancy, rental income and collection rate during the period March to December 2020 whereas the global community experienced negative growth during the same period.

3.2 Research Philosophy

There are two key research philosophies that are positivism and phenomenology. All knowledge according the positivistic philosophy is general based on the sense given as the real source of knowledge thus what is actually and originally given whereas phenomenology refers back to evidence available (Sinha,1963) . Positivists assume that reality is fixed while phenomenologist researchers assume that reality constantly changes therefore are multiple versions of reality (Rubin and Babbie, 2010).

Further to the positivist and phenomenologist there are other alternative philosophies that are realism and interpretivist (Saunders et al., 2012). As stated by Saunders et al. (2012), realism is based on the belief that a reality exists while interpretivist considers a subjective view of, actions and business situations.

Based on Davidson (2000) and Jones (2001), the researcher recognised that philosophies are situational and therefore none is superior to the other. The researcher identified and adopted the phenomenology and interpretivist research philosophy as the best means for the study as they are concerned with understanding of human action. This philosophy was chosen instead of the positivist or realist research philosophies because it is a subjective philosophy that gathers data based on experiences of participants, constructs and interpret understanding from the gathered data and explain the consequences of human actions on the environment (Yoshida, 2014). In addition, the intention of this research, was to gather data in respect to the perspectives of the participants about the phenomenon of the effects of COVID-19 pandemic on performance of real estate properties.

The interpretivist research philosophy chosen focused on predominantly use of qualitative approaches and case study research strategy as it permitted the researcher to collect exhaustive information on the area under study while the phenomenology assisted to gather evidence about the problem.

3.3 Research Approach

There are two approaches to a research that is a deductive and inductive approach (Saunder, et al, 2012). A deductive approach uses a hypothesis that is tested to confirm an existing theory (Wilson, 2010). Deductive means reasoning from the particular to the general (Gulati, 2009) therefore it follows a logical path leading to a either validation or a dismissal of the hypothesis (Snieder and Larner, 2009)

On the other hand, inductive approach, proposes theories from observations gathered (Goddard and Melville, 2004). Saunders et al. (2003) suggests that inductive approach emanates from learning experiences that identify patterns that result in the development of a theory. This research followed an inductive approach as to get an understanding as of the problem in relation to the effect of the COVID-19 pandemic on office and retail properties. In this research inductive approach was used since there is need to explore data in relation to the performance of commercial properties within the real estate sector.

3.4 Research Design

A research design outlines how to collect data, analyse and interpret it to provide an answer to the problem (Sekaran, 2003). According to Akhtar (2016) the research design should be identified after careful consideration of the topic, research problem, and the research objectives and after the research questions have been formulated and the concepts under study have received attention in terms of identification and explanation. Ghauri and Gronhang (2002) in Saunders et al. (2003) highlighted that research should be based on rational relationships, not just opinions. Research design comprises exploratory, descriptive and explanatory (hypothesis testing). For this research, the researcher used both exploratory and descriptive research.

3.4.1 Exploratory research

According to Bryman (2016), explorative studies are undertaken when a new area is being investigated or when little is known about an area of interest. Sakaran (2003) confirms this notion when he mentions that an exploratory study is undertaken when there is limited knowledge the problem. Exploratory research is not intended to provide conclusive evidence, but helps us to have a better understanding of the problem (Saunders et al., 2012).In this case the researcher intended to explore more on the effects of COVID-19 on the performance of occupancy and rental collection rate for properties categorised under office and retail sector.

3.4.2 Descriptive research

A descriptive study is undertaken to ascertain and define the characteristics of the variables of interest in a situation (Sekaran, 2003). A descriptive survey uses standardised questions to gather information from the sample (Collins and Hussey, 2013). A descriptive survey research design was used to analyse demographic data of the target population.

3.5 Research Strategies

The research strategy contains clear objectives, sources of data and challenges encountered Saunders et al. (2012). The research strategies that can be employed according to Saunders et al. (2012) are experiment, survey, case study, grounded theory, ethnography, action research, cross sectional and longitudinal studies and exploratory, descriptive and explanatory studies.

Different methods can be used for different purposes in a study. While this paper is a case study where focus was on the four real estate companies listed on the Zimbabwe Stock Exchange, it is recognized that the strategies do not exist in isolation. A longitudinal approach was used to track the events over the period March 2020 to December 2020 while the case study approach allowed the researcher to be in direct contact with the participants. Through this strategy, the researcher managed to gather realistic and reliable data because the chosen strategy was highly flexible and it incorporated various perspectives and interpretive strategies.

3.6 Methodology and Data Collection Methods

3.6.1 Methodology

A research may adopt a qualitative, quantitative or mixed methodology to accomplish the research objectives. According to Saunders et al. (2009), a qualitative research employs an inductive approach where theory is generated from the research, while a deductive approach is adopted for a quantitative research which tests the theory. To summarise the difference between the two, when collecting data and analysing it, a qualitative research can be constructed as a research that focuses on words and meaning while quantitative is based on numbers and statistics and the quantification thereof (Bryman and Bell (2007).

To achieve the research objectives, the study utilised the qualitative data collection method that is exploratory in nature and mainly concerned with gaining insights and understanding on underlying reasons and motivations (Polonsky and Waller, 2011). This was done through collection of primary and secondary data to address all the research objectives.

3.6.2 Data collection Methods

3.6.2.1 Secondary data collection

The researcher made use of document analysis as a secondary data collection method. This utilised annual reports, newspapers, company newsletters and publications accessible with respect to the research problem. Document analysis enabled the researcher to examine the performance of real estate companies amid the pandemic by going through their financial statements. The data is widely available on company websites and information portals.

3.6.2.2 Primary data collection method

Collection of primary data involves gathering of data from its source for the first time and with the research specific purpose in mind (Cooper and Schlinder, 2006). While a desktop study method was applied to fulfil the demands of the first objective of the study. This method had its limitations in fulfilling the demands for of the research topic. It is from this data that the researcher draws conclusions to a research study. The researcher basically collected primary data from the fieldwork through the use of open ended questionnaires and semi structured interviews as highlighted in detail below.

3.6.2.2.1 Questionnaire

The researcher used questionnaires to gather data that would satisfy the purpose of the research. The major advantage of using the questionnaire is that it can be administered at the same time and contains documented data improving precision of the results (Vandebosch & Green, 2019). The questionnaires were administered via link sent through various online platforms. The questionnaire target to gather information of performance of the various commercial real estate subsectors in terms of occupancy, rental collection rates and the effect of the COVID-19 on the same. Respect for privacy and confidentiality was observed since the interviews were conducted via telephone.

3.6.2.2.2 Interviews

The interviews were used by the researcher to complement what would have been left out in the questionnaires. The interview was very useful in following up on issues that needed clarification on aspects that could not be outlined in the questionnaires. More importantly, the researcher had the opportunity to gather information from the interviewee that had been filtered as respondents feared to disclose all the information in writing but were more reluctant to disclose the same on face to face interviews. As noted by Williams (2011) interviews give an allowance to probe questions and follow ups on response to gather adequate information. Given, that the research was primarily concerned with establishing the effects of the COVID-19 pandemic on the sectors within the real estate sector. The interviews were mainly done for senior management personnel who had vast experience in the management of commercial real estate which are mainly office, hotels, industrial and retail properties. The interviews were largely semi- structured but well-designed questions to guide the responses (see Appendix A).

3.7 Population and Sampling Techniques

3.7.1 Target Population

Population refers to the group of interest that the researcher is targeting (Sekaran, 2003). The population should be properly defined to avoid any ambiguity in the determination of whether a particular unit belongs to the population or not. A population thus consists of a set of units which have variable characteristics adequate enough to generalise findings from the research. It is in the same vain that this research study targeted 16 respondents within the four real estate companies listed firms on the Zimbabwe Stock Exchange and these firms include Dawn Properties, Mashonaland Holdings, Zimre Property Investments and First Mutual Properties. These property companies where selected as they are the only listed companies on the Zimbabwe Stock Exchange (ZSE) thus are obligated to publish results through interim and annual reports, enabling the researcher to gather enough data on the research topic.

3.7.2 Sampling method

The target population was four companies listed on the ZSE hence the sampling method was applied on these companies. The sampling method used was non-probability sampling. In non-probability the participants are not chosen on the basis of attaching probabilities (Sakaran, 2003). The researcher therefore used convenient and snow ball sampling to have the data collected. In convenience sampling members of the population who are available are chosen (Greener, 2008) while snowball sampling is a non-random sampling method that uses identified participants to encourage other participants to take part in the study (Stake, 2005). The snowball was meant to ensure that all respondents identified and chosen would participate.

3.7.3 Sample size

Generally sample size describes the size of the subset of the target population the researcher used. Saunders et al. (2003) is of the opinion that a sample size of 30% of the target group gives results that are considered reliable. In this research the target population was equal to the sample size where all 16 respondents in the four listed companies where used. Usually a sample is used as it may be impracticable to interrogate the whole population. Further, in order to reach the desired confidence level, the whole set of units had to be incorporated in the research, targeting 4 respondents within each company. Therefore 16 respondents who constituted both male and female, aged between 21 and 30 years who occupied positions either in lower, middle or upper management within the property management section in each of the four companies.

3.8 Data Analysis

Research data gathered from the fieldwork was analysed qualitatively by categorising it into various classes to draw generalised conclusions. For reliability and validity testing, the data items (responses were grouped according to their categories as illustrated in the questionnaire). A descriptive analysis preceded an exploratory analysis of the demographic trends in the surveyed population. For that reason, results would be displayed in the form of bar charts, frequency graphs and summary tables.

3.9 Reliability and Validity of Data

Reliability refers to the derivation of similar results if questions are repeatedly asked after a certain period of time under similar conditions. Validity aims to measure the truthfulness of results. Validity refers to the ability of a question to measure what it is intended to measure. To ensure validity and reliability of the research questions, the researcher did a pre-testing process with colleagues and the supervisor where adjustments were made to avoid unnecessary mistakes or omissions in collection of the data.

3.10 Ethical Considerations

Thompson et al. (2005) argues that ethics involve concepts of morality in any research. This section briefly summarises the ethical issues relevant to the research study. The study is sensitive and as such the researcher faced challenges in collecting data from real estate companies' understudy. In this regard, the researcher sought consent from participants and respect confidentially. Further the researcher also ensured that there is no fabrication of data to support the study. The researcher also acknowledged the source of information from all consulted parties who were not concerned with disclosure.

3.11 Chapter Summary

This chapter looked at the methodology used by the researcher in conducting the research. The target population was identified and the sampling techniques and the sampling methods that were used. The researcher went on to explain the research instruments used and why they were chosen. Moreover, the researcher's efforts to ensure reliability and validity of data was postulated. Data collection procedure was also well described and the researcher ended up by giving an insight on the data analysis and presentation tools that were used in carrying out this study. The next chapter however focuses on data presentation analysis and interpretation of the research findings in light of the aim and objectives of the research and methods outlined in this chapter.

CHAPTER FOUR: FINDINGS AND ANALYSIS

4.0 Introduction

Chapter three detailed the research methods adopted and applied in this study. This chapter will focus on presentation and analysis of findings derived from an analysis of data gathered through the questionnaire administered. The Chapter brings out the effects of COVID-19 on occupancy, rental income and collection rate performance of commercial real estate. Analysis of the data collected is centred around the key questions of the study and in some cases on theoretical concepts.

4.1 Response Rate

Section 4.1.1 and 4.1.2 provides a summary of the response rate for questionnaires and interviews, respectively. The response rates are as shown in table 4.1. Response rates are calculated using the formula below:

Response rate = (number of questionnaires retuned/ number of questionnaires sent) *100%

Or response rate= (number of interviews undertaken/ number of targeted interviews) *100%

4.1.1 Questionnaire response rate

Table 4.1.1: Questionnaire response rate

Respondent	Zimre Property Investments	Dawn Properties	Mashonaland Holdings	First Mutual Properties
Questionnaires administered	4	4	4	4
Number returned	4	3	3	3
Response rate	100%	75%	75%	75%

Source: Fieldwork (2021)

The overall response rate was at 81.25%. Sixteen questionnaires were distributed to Property Managers and 11 out of 16 responses were obtained. The high rate of responses was as a result of the sampling technique that included snowballing where questionnaires were distributed to various property managers within each company. The response rate was considered adequate for analysis of the effects of COVID- 19 on the performance of the properties under their management.

4.1.2 Interview response rate

Table 4.1.2 Interview response rate

Respondent	ZPI	Dawn	Mashonaland Holdings	First Mutual Properties
Targeted interview	1	1	1	1
Interviews undertaken	1	1	1	1
Response rate	100%	100%	100%	100%

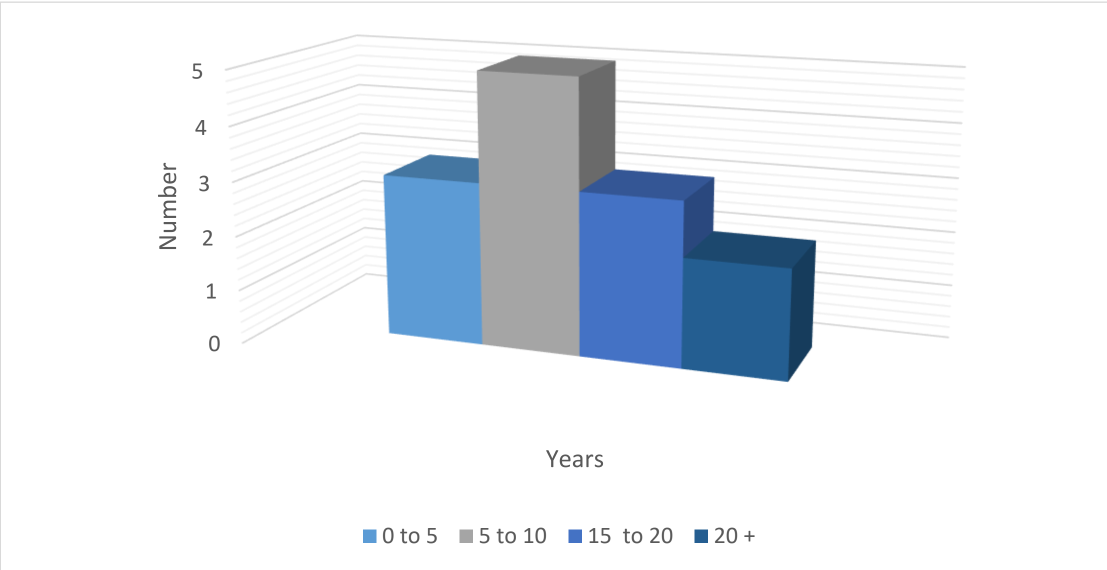
Source: Fieldwork (2021)

A total of four interviews were scheduled for senior property managers who made up the total population sample of this research. All of the property managers were interviewed and the overall response rate was 100%. The response rate was adequate for the researcher to probe and get clarity on some of the aspects in the study.

4.2 Profile of Respondents

4.2.1 Respondents Years of Experience

Figure 4.2.1: Experience of Property Managers

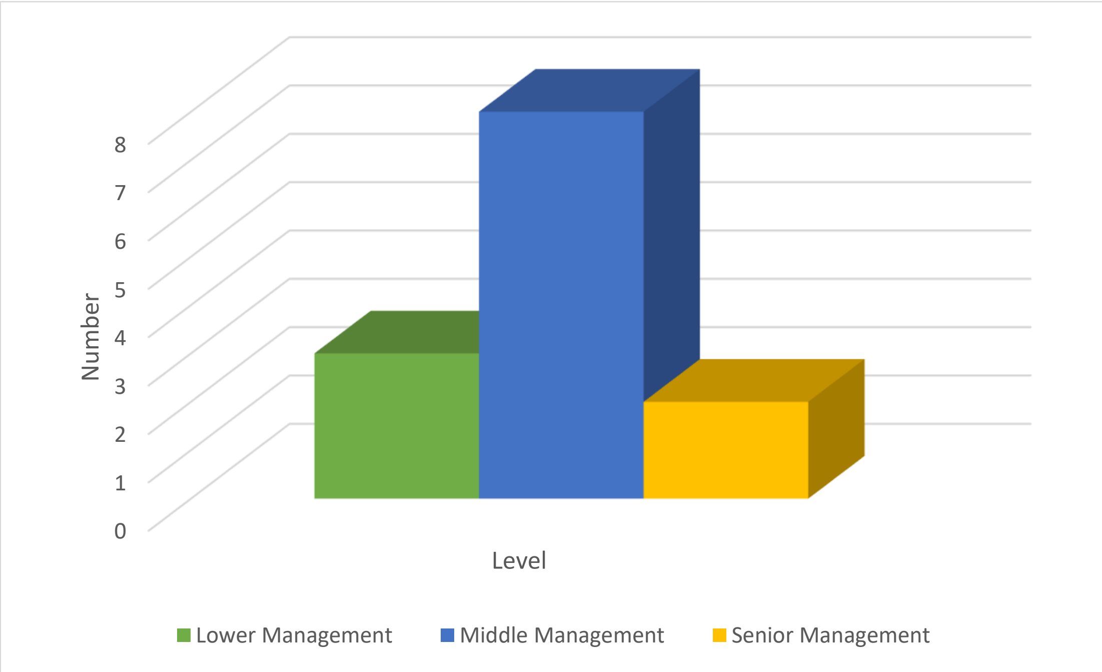


Source: Fieldwork (2021)

As shown in figure 4.3, out of the 16 property managers who participated in the research, 77% of the respondents were constituted as 38% between 5-10 years, 23% between 15 to 20 years and lastly 15% above 20 years' experience, to have worked for the organisation for at least five years while 23% have experience of less than five years in the field of property management. Given the above information, it is generally agreeable that the majority of respondents have the adequate in-depth knowledge of the real estate sector and its key performance indicators hence are considered to provide valid data in relation to the study.

4.2.2 Position held within the Organisation

Figure 4.2.2: Positions of respondents



Source: Fieldwork (2021)

23% of the respondents were in the low level and held positions of property officer or administrator, while the majority of 62% occupy positions in the middle level and 15% hold senior positions. Middle level positions included that of property managers while senior level hold positions such as Investment Managers and General Manager.

4.2.3 Gender, Age and Level of education

Table 4.2.3: Gender, Age and Level of education

Description	Parameters	Frequency	Percentage
Sex	Male	11	69%
	Female	5	31%
Age	21-30	3	23%
	31-40	6	31%
	41-50	5	38%
	Above 50	2	8%
Level of education	Certificate	0	0%
	Diploma	2	12.5%
	Bachelors	8	50%
	Masters	6	37.5%
	PhD	0	0%

Source: Fieldwork (2021)

The respondents were also classified according to age, sex and highest level of academic achievements attained. The profile was aimed at giving an overview of the quality of respondents as it was essential in determining the legitimacy and credibility given the fact that the research was primarily opinion seeking. From the data collected in Table 4.3.3, 69% of the respondents were male while 31% were women. Further, 12.5% have a diploma, while 50% of them attained a degree in the relevant field as the highest qualification and 37.5% advanced their education and attained a master's degree.

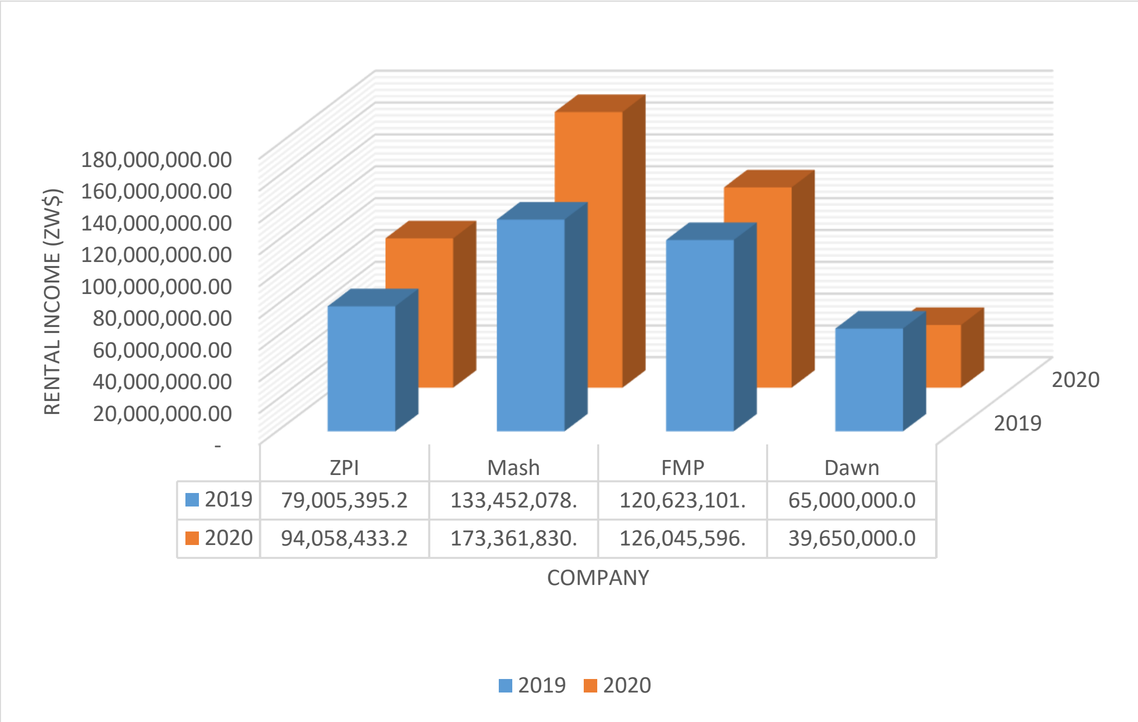
4.3 Performance of Properties

4.3.1 Rental income for listed companies for the period 2019 to 2020

Rental income for Zimre Property Investments increased by 19% from 2019 to 2020 while Mashonaland Holdings and First Mutual Properties recorded a growth of 30% and 4% respectively. Conversely, Dawn Properties recorded a rental income growth of negative 39% thereby being the only listed real company declaring a negative growth rate in terms of rental income.

Figure 4.3.1 Rental income 2019 to 2020

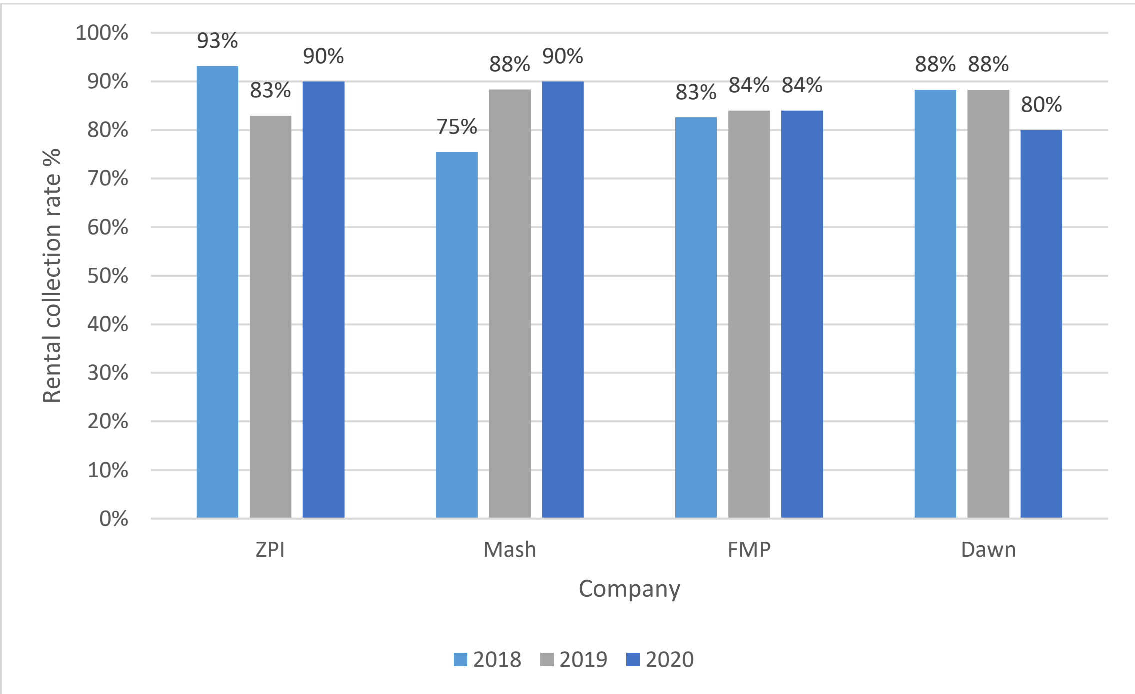
[1]



Source: Fieldwork (2021)

4.3.2 Rental collection rate 2018 to 2020

Figure 4.3.2 Rental collection rate 2018 to 2020



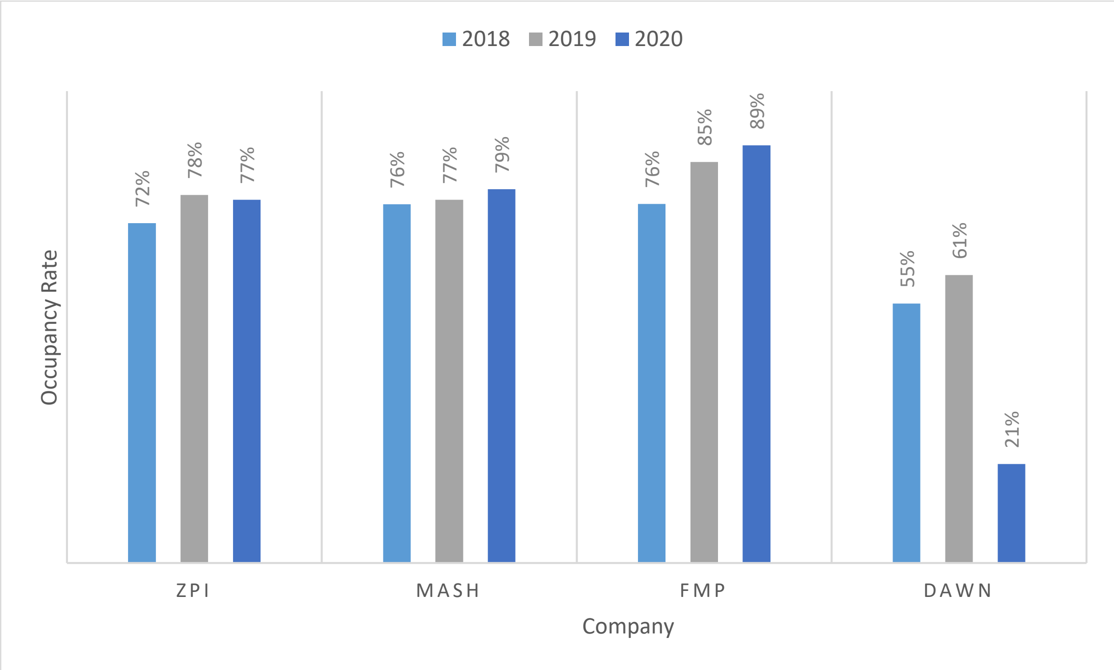
Source: Fieldwork (2021)

[1] The year 2018 was excluded as rental income was denoted in USD instead of ZWL. Rentals presented are inflation adjusted figures.

The rental collection rate gradually increased from the period 2018 to 2019 by an average of 3%. Zimre Property Investments (ZPI) recorded a rental collection rate of 90%, 7% up from 83% recorded in while2019, while Mashonaland Holdings (Mash) recorded a growth of 2% in 2020 from 88% recorded in 2019. First Mutual Property (FMP) occupancy rate increased by 1% from 2018 to 2019 and remained unchanged for the year 2020 and Dawn recorded 80% as the annual average collection rate 8% down from 88% in 2019. Of the four companies ZPI recorded the highest positive increase of 7%.

4.3.3 Occupancy rate 2018 to December 2020

Figure 4.3.3 Occupancy rate 2018 to December 2020



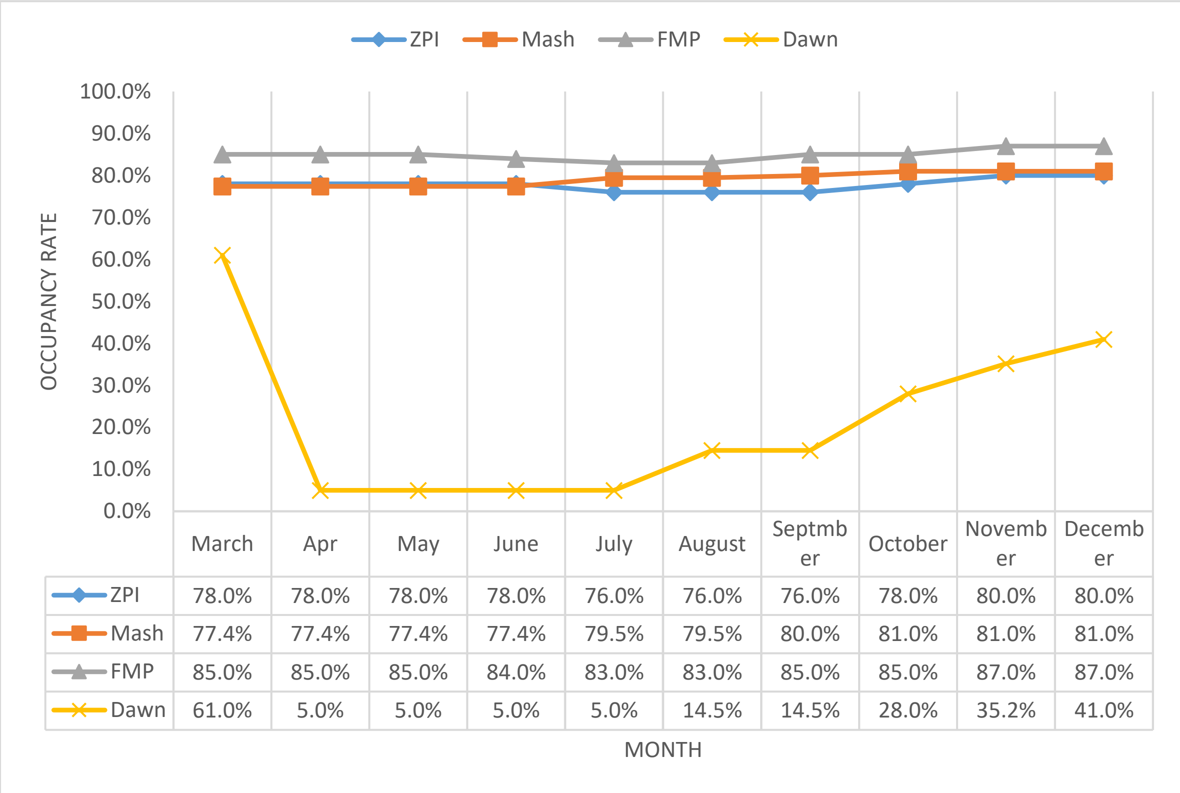
Source: Fieldwork (2021)

ZPI recorded a negative growth of 1% from 2019 to 2020 while Mashonaland Holdings occupancy rate increased by a 2% from 77% recognised in 2019. First Mutual Properties maintained a high occupancy rate compared to other real estate companies as depicted in Figure 4.4.3 above. The company occupancy rate in 2020 was at 89%, 4 points up from 85% recorded in the previous year, 2019. Dawn Properties occupancy was on an upward trend depicted by 55% recorded in 2018, 61% in 2020 before it plummeted to 21% in 2020.

4.3.4 Monthly occupancy rate from March to December 2020

The occupancy rate for the companies remained stable over the period March to December 2020 except for ZPI that declined by 1% from 78% to 77%, a drop in the office sector as a result of voluntary space surrenders. Mashonaland Holdings occupancy rate remained stable and First Mutual Properties experienced a decline in July and August but gained by an average of 25 to close at 87%.

Figure 4.3.4: Occupancy rate March to December 2020



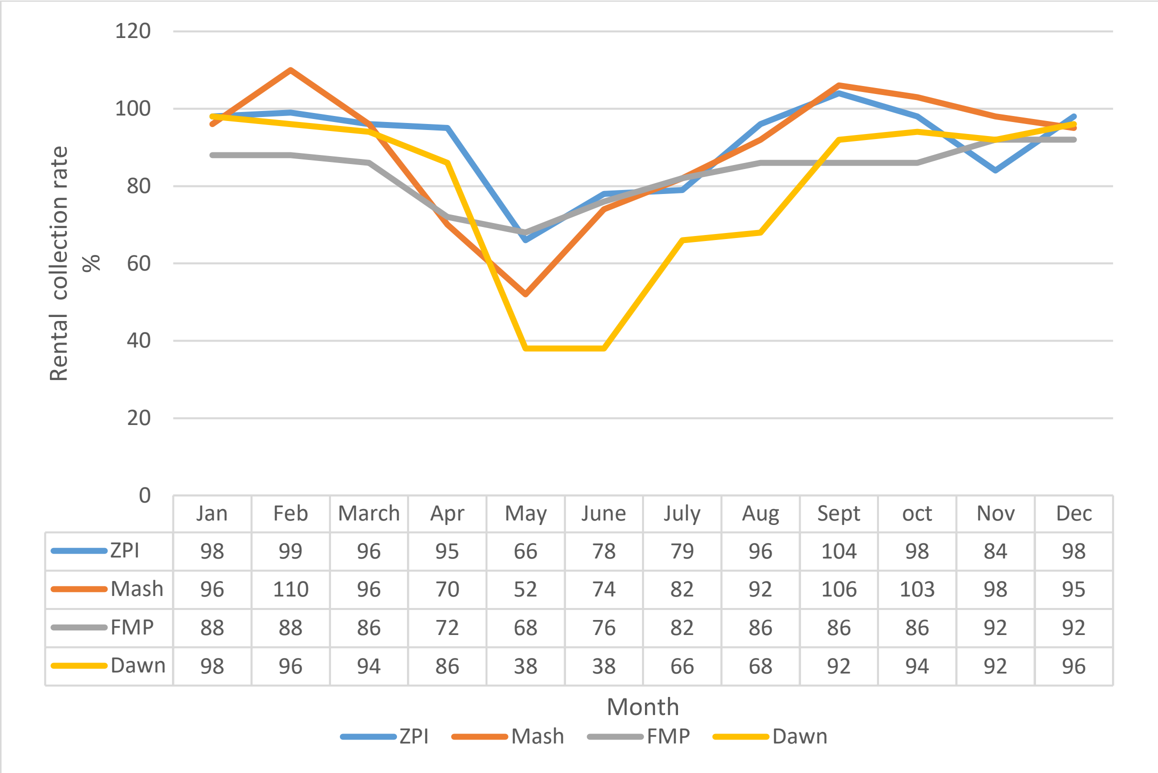
	March	Apr	May	June	July	August	Septmber	October	November	December
ZPI	78.0%	78.0%	78.0%	78.0%	76.0%	76.0%	76.0%	78.0%	80.0%	80.0%
Mash	77.4%	77.4%	77.4%	77.4%	79.5%	79.5%	80.0%	81.0%	81.0%	81.0%
FMP	85.0%	85.0%	85.0%	84.0%	83.0%	83.0%	85.0%	85.0%	87.0%	87.0%
Dawn	61.0%	5.0%	5.0%	5.0%	5.0%	14.5%	14.5%	28.0%	35.2%	41.0%

Source: Fieldwork (2021)

4.3.5 Monthly rental collection rate from March to December 2020

The rental collection rate dropped from an average of 93% recorded in the end of the first quarter to 66.5%as the second quarter ended, and slowly recovered reaching 97% by the third quarter and closing the year at 95%. Upon further interrogation of the sharp decline from the period March to June 2021, the companies indicated various factors explained in Section 4.4 below.

Figure 4.3.5 Month on month rental collection rate March to December 2020



	Jan	Feb	March	Apr	May	June	July	Aug	Sept	oct	Nov	Dec
ZPI	98	99	96	95	66	78	79	96	104	98	84	98
Mash	96	110	96	70	52	74	82	92	106	103	98	95
FMP	88	88	86	72	68	76	82	86	86	86	92	92
Dawn	98	96	94	86	38	38	66	68	92	94	92	96

Source: Fieldwork (2021)

4.4 Factors Influencing Key Performance Indicators

The respondents were asked to outline the factors that influenced their rental collection and occupancy rate in 2020. Their responses were grouped into five categories namely COVID-19, operating environment, portfolio structure, demand and supply fundamentals and internal systems and processes.

4.4.1 Operating environment

The operating environment was discussed in the context of the general external environment to the companies. The respondents indicated that the operating environment remained among the factors in 2020 that influenced key performance indicators citing currency depreciation and rising inflation as the chief components that strained general business performance. In particular ZPI and First Mutual Properties indicated that the reduced capacity utilisation and rising inflation rate in the first half of the year led to a significant increase in operating costs of the properties as service providers indexed their charges to the United States Dollar while rentals remained lagging behind.

Mashonaland Holdings specified that policy inconsistency predominantly affected performance of their commercial real estate resulting in a slow growth rate for example introduction of the Zimdollar as the sole local currency in June 2019 through SI 142 of 2019 and later SI 85 of 2020 that allowed a dual pricing system. The company further mentioned other factors that influenced its performance as production reduction in economic pillars (agriculture, mining and tourism), fall in exports, depreciation of local currency, drought that reduced agricultural production, fall in exports and legacy economic challenges.

Dawn stated that the decline in economic activity curtailed productivity and growth although it was more stable at the end of third quarter compared to the beginning of the year as a result of the introduction of the foreign currency exchange auction system.

4.4.2 Portfolio structure

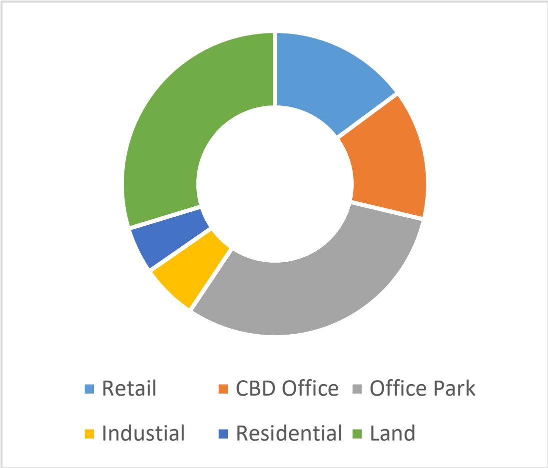
75% of the respondents agreed that the portfolio structure was also influential on the performance of the companies in terms of rental collection, income and occupancy rate. 3 out 4 of the companies indicated that their property portfolios were largely diversified into office, retail, industrial, residential and specialised use such as hospitals compared to Dawn that largely provided hotel accommodation, concentrated in tourist destinations as shown in Figure 4.4.2. Dawn on the other hand indicated that its portfolio largely comprised of short-term accommodation. The company indicated that its portfolio structure has never been a concern as its core business was to provide hotel accommodation and diversification was mainly in within the confines of its core business where it provided various types accommodation that is hotels and lodges spread in different locations.

ZPI highlighted that its portfolio was widely spread geographically and also varied containing office, retail, and student accommodation, industrial and residential. Mashonaland Holdings indicated that its portfolio contained all of the commercial real estate asset classes including the health sector compared to other portfolios but was largely concentrated in Harare. Mashonaland Holdings owns hospitals such as Westend Hospital.

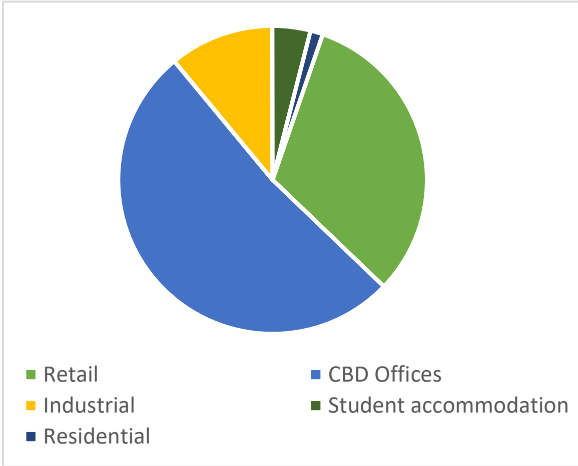
First Mutual Properties also highlighted that its portfolio was widely spread compared to others where 15% of the portfolio was occupied by retail space in both the CBD and suburban areas with anchor tenants such as “Pic and Pay, Bon Marche and Spar.

Figure 4.4.2 Portfolio structure of the listed companies

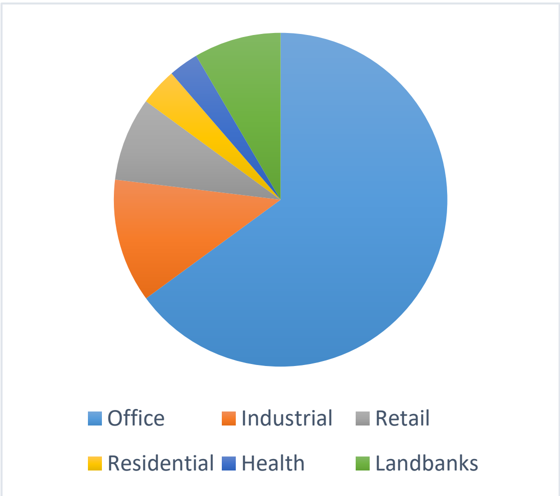
First Mutual Properties



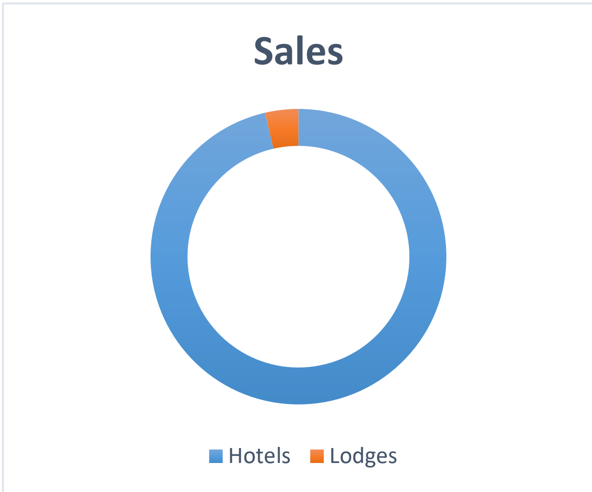
Zimre Property Investments



Mashonaland Holdings



Dawn Properties

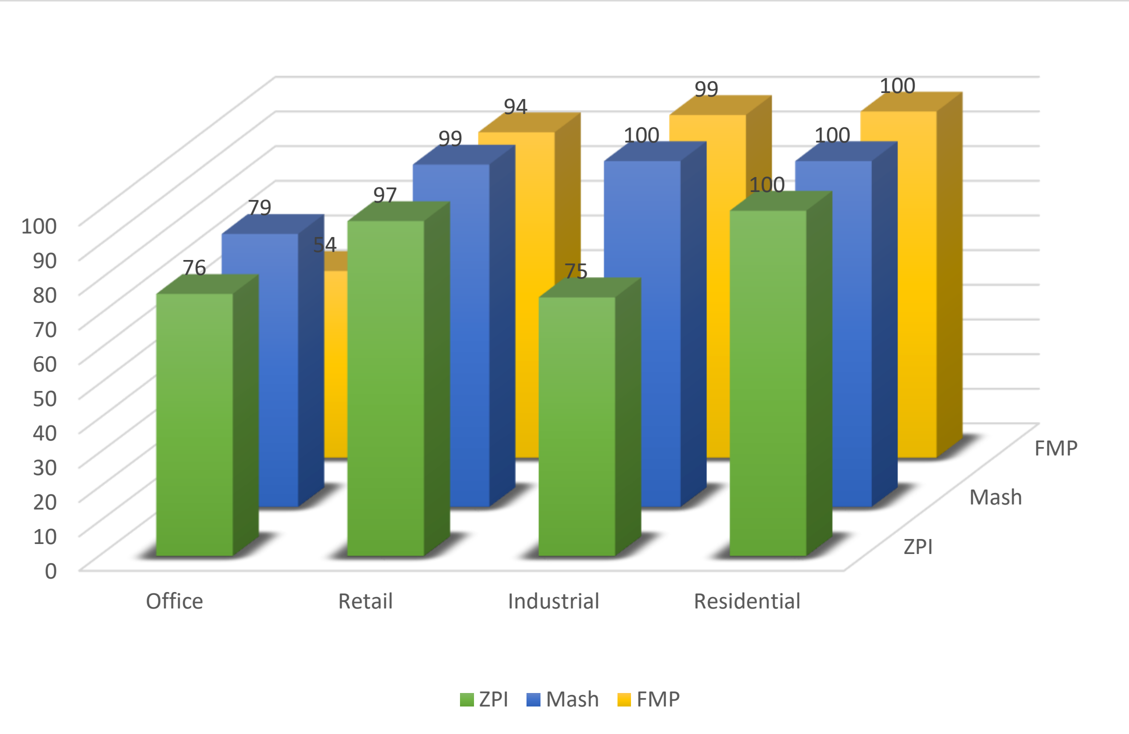


Source: Annual and Interim reports (2020)

4.4.3 Demand and supply

The level of occupancy is a very good indicator of demand and supply.75% of the respondents highlighted that demand for space especially for CBD office and industrial properties remained weak compared to the retail and office parks .This was evident by the occupancy rates for all other real estate subsectors that were fairly above 90% except for office space that was ranging between 50% and 75%. 25% of the respondents indicated that demand for space reduced significantly for tourism related assets. Dawn indicated it lost foreign customers because of the travel restrictions imposed by governments. To induce demand for the hotel rooms, a bulk of its hotels had to offer a discount of 50% on the room rates. This was done to mainly capture local tourists as airlines had been grounded reducing flights into Zimbabwe by 30%. The respondents indicated that it thrived on the tourism sector therefore its demand and supply factors were largely affected by performance of the tourism industry and economic performance as a whole.

[2] **Figure 4.4.3 Occupancy rate per sector**



Source: Fieldwork (2021)

4.4.4 COVID-19

Dawn attributed the movement in its occupancy and rental collection rate to COVID-19 as it accommodates hotels that are largely exposed to the tourism sector. The company further indicated that COVID-19 through government induced travel restrictions and lockdowns had largely affected its performance as it experienced almost 32,000 room nights' cancellations.

On the other hand ZPI, Mash and FMP highlighted that they housed most of the essential services sector which included the Supermarkets and pharmacies at various shopping centre sites hence COVID-19 had a net positive effect on the business operations compared to other factors. Mashonaland Holdings emphasised that it performed well during COVID-19 as it

[2] Dawn property occupancy rate was excluded from Figure 4.5.2 to avoid distortion of presentation of bar chart nevertheless the average occupancy rate was 21% for its hotel and lodges portfolio

accommodated specialised use properties in the health sector such as Westend Hospital and pharmacies while First Mutual Properties highlighted that 5% of its portfolio was suburban retail, also housing supermarkets and pharmacies that are in the essential services sector. Nonetheless, the respondents mentioned that although the overall impact of COVID-19 was minimal its influence on the key performance depended on the level of lockdown. The second quarter was more severely affected compared to other periods as the country was in a total lockdown. Business operations were largely affected compared to other periods that saw government relaxing some of the lockdown restrictions. ZPI indicated that the portfolio performed well in terms of rental income and collection as rentals were boosted by regular rental reviews and improved rental turnover on retail space that then covered up for poor performance in tourism related assets such as Sawanga Mall in Victoria Falls and student accommodation in Bulawayo as universities were closed for the bulk of 2020.

Mashonaland Holdings indicated that rental collection rate remained resilient as its portfolio contained all of the commercial real estate asset classes except for hotels, with the health sector outperforming all other sectors.

4.4.5 Internal processes and systems

75% of the respondents indicated that internal systems and processes somewhat had a more severe effect on the business operations than COVID-19 while 25% indicated that they had the least influence on occupancy and rental collection rates. The respondents highlighted that some company policies were restrictive while others were actually progressive. The respondents although not specific mentioned that the internal processes of approvals were too long and bureaucratic. These policies included the process of handing over defaulting tenants to lawyers where a file had to be assessed by three to four people before being submitted to the lawyers such that by the time the lawyer actioned the file the tenant would have accrued more debt and hence the need to update the tenant statements once again.

On the other hand, the respondents indicated that they had robust standard operating procedures that resulted in them adopting vigorous property management measures that guaranteed satisfactory performance of the assets. This means that despite changes in the external environment, the company performance in the short run would remain buoyant. Mashonaland Holdings highlighted that it upgraded its tenant on boarding and arrears collection policies, while First Mutual Properties had to do direct engagements with defaulting clients that proved to be more effective in reducing its liability. It was also noted that these companies adopted measures such as payment plans for defaulting tenants that would not exceed 4 months hence the rentals would be collected in the same accounting period reducing the arrears level thus maintaining an overall collection rate above 80% at the end of the year.

4.5 Effects of COVID-19 on Business Operations

To assess the possible nature of the effects of COVID-19 on business operations and key performance indicators, respondents were also asked to classify the severity on a scale of 1-5 as presented in table 4.6.

Table 4.5: Effects of COVID-19 on operations

Item		**Not impacted (1)**	**Slightly impacted (2)**	**Neutral (3)**	**Very impacted (4)**	**Extremely impacted (5)**
1	Rental collections / cashflows		x			
2	Occupancy rates	x				
3	Rental charges for new leases	x				
4	Rental reviews for existing leases			x		
5	Space uptake by prospective new tenants		x			

Source: Fieldwork (2021)

4.5.1 Rental collections

The respondents indicated several challenges that were experienced as a result of the pandemic. 50% (2 out 4) of the respondents interviewed advised the Level 5 lockdown that saw the country going into a sudden total lockdown made it difficult for the companies to make rental follow ups on defaulting tenants as it disrupted their business operations hence a collection rate dropping by 30-50% in the second quarter of 2020. The companies indicated that they had not planned or put in place systems to support the “work from home” concept and that their information systems could only be accessed using the local Internet Protocol hence the property management system could only be accessed when one was within the office premise hence there was no way they could access tenant information.

50% highlighted that although it was difficult to collect rentals from the tenants, the major reason was that their tenants experienced low sales volumes during the lockdown period thus affecting their cash flows and ultimately ability to honour lease obligations. This was peculiar for portfolios with tenants in the retail category such in the non-essential services sector such as hardware, clothing, and refreshments for example BATA, Electrosales, Halsteds and Delta that appeared to be hit the most. Further, travel restrictions meant that goods in transit could no longer be delivered while there was little movement in existing stocks because of the restrictions.

Further, the respondents indicated that the effects of COVID-19 were differential where it affected collections mostly in the second quarter of 2020 that had no recourse for handling defaulting tenants as the country was in Level 5 lockdown that saw courts operating at 10% capacity level. This meant that courts would only attend to matters classified as urgent and that that had material impact on the society. Consequently, rental defaults were not been attended to that led to the delay in conclusion of the cases handed over to lawyers for termination and or recovery of the debt.

25% of the respondents indicated that the retail sector was affected more by the lockdown restrictions while ZPI and FMP highlighted that the impact was minimal as their retail property largely accommodated supermarkets and fast food retail outlets such as OK, TM Pic “n” Pay, Spar, Chicken Inn and Chicken Slice that remained open during the lockdown period and consequently also had less competition as the informal sector was closed during the period. The companies indicated that they benefited from the increase in turnover as they had turnover based lease agreements in place. In particular ZPI indicated that it only experienced a decline in May 2020 only where its collection rate declined from 95% recorded in April to 66% in May 2020 and by 50% compared to the same period in the previous year.

On the other hand, the respondents indicated that collection rates for other sectors in the non-essential service sector such as office, were depressed but the impact was not significant as tenants feared triggering a contractual breach emanating from withholding rent payments. Upon further interrogation of the matter, the respondents indicated that government had distanced itself from applying a blanket cover that would either be in form of a rent relief, holiday or discount, as such each party had to negotiate in their individual capacity any waiver of lease terms. Failure to pay rentals would result in the landlord to force performance on the other party and or terminate the lease agreement. On cancellation of the lease the tenant would also be liable to pay for the outstanding rental plus damages and all litigation costs incurred. Unfortunately this would be costly for tenants and therefore forced then to comply with the lease terms and conditions.

4.5.2 Occupancy rates

Zimre Property Investments Annual report (2020) highlighted that the COVID-19 pandemic paralysed performance of tourism related assets, student accommodation while other asset classes remained somewhat resilient. On the other hand, Mashonaland Holdings in its 2020 Annual report, commented that the effect of the COVID-19 pandemic on occupancy rate was not dire as initially anticipated, reflected by no voluntary space surrenders by tenants. First Mutual Properties Trading update as at 30 September 2020 stated that the impact of COVID-19 on business operations was severe in the second quarter of 2020 but the overall effect occupancy rate remained minimal as the virus seems to have had differential effects on the different real estate subsectors.

Alternately, Dawn Properties pointed out that, the hotel sector was hit the most compared to other sectors evident by the low occupancy rate experienced by Dawn properties that was 5% during the Level 5 lockdown period and a yearly overall of 21% from 61% prior to the outbreak. The company indicated that hotels were closed since March 30 and only to reopen around the end of June 2021. As the lockdown measures were relaxed, with government allowing domestic flights in July 2020, occupancy gradually increasing to 41% by December 2020 as domestic tourist booked accommodation in the hotels.

In a nutshell, the respondents indicated that the effect of COVID-19 on occupancy rate was not significant due to several factors that included the need for the tenants to maintain rental space that was strategically located, accessible to the customers and certain amenities and infrastructure and competition. Therefore there are various factors that would be considered before a decision to release space is undertaken other than focusing on the outbreak of the COVID-19 pandemic.

4.5.3 Rental charges for new leases

COVID-19 was officially declared a national disaster in Zimbabwe on 17 March 2020. 50% of the respondents indicated that new leases that had already been concluded before the declaration were set to have been effective and rentals for the current and succeeding months considered to be due. Alternatively, the other set of respondents indicated that rental charges for new leases were not affected by COVID-19 citing that either they aborted the negotiation process altogether or postponed until the environmental fundamentals had been restored. As such the respondents indicated that they were not in hurry to conclude lease negotiations on new clients but rather focused on existing tenants.

4.5.4 Rental reviews for existing leases

All the respondents indicated that the COVID-19 pandemic greatly affected rental negotiations. It was stated that rent reviews were becoming more difficult as the tenants' rent paying capacity continued to erode as a result of the pandemic due to tight cash flows. The national lockdown, while necessary, has had an impact on tenants' beneficial occupation, putting pressure on collection and space absorption. Dawn Properties, on the other hand, pointed out that reviews were suspended following the introduction of Statutory Instrument Rent ("SI") 96 of 2020 that deferred rental reviews during the lockdown. The respondents highlighted that they could not proceed with adjusting rentals until the lockdown period had been declared to be over. Nevertheless, the respondents further highlighted that other than COVID-19, rentals for all real estate subsectors underperformed as rental reviews lagged behind inflation and exchange rate movements.

4.5.5 Space uptake by new tenants

All the respondents highlighted the overall uptake of space was low as a result of the pandemic. There were no new space uptakes in the second quarter of 2020 as the country was in Level 5 of lockdown that restricted movement to a 5km radius from the place of an individual's place of residence. This meant that viewing of properties that an essential component in securing space for rental could not be undertaken. 50% of the respondents highlighted that uptake improved in the third and fourth quarter where the country had moved to Level 2 and 1 respectively, allowing movement of people. ZPI that experienced a drop of 1% in occupancy rate, indicated that it did not manage to then secure new tenants of the vacant spaces as tenants feared a recurrence of the Level 5 lockdown in the near term that would affect their cash flows and ultimately constrain their ability to fulfil lease obligations.

4.6 Long-term Effects of COVID-19

The respondents were asked to give an outlook on the performance of their commercial real estate portfolio and the possible long-term effects of the COVID-19 pandemic on occupancy and rental collection rate. In response the respondents presented almost the same opinion indicating that the sector is likely to be affected by the second wave of COVID-19, in the near future as predicted by experts. Nonetheless the effect on the key performance indicators will likely to be minimal as companies have developed contingency plans and adjusted business operations in view of the reoccurrence of Level 5 lockdown. The respondents also mentioned that they had already started on enhancing the buildings to adjust to the new normal while most businesses have already started to implement working capital solutions. In addition, the respondents mentioned that the companies were also debating on the viability of some location in view of a second wave happening or anther health pandemic occurring.

Dawn Properties highlighted that tourism drives hotel performance therefore the impact on hotel occupancies will be determined by the performance of the tourism sector as that is also surrounded by high levels of uncertainty. First Mutual Properties indicated that the impact on occupancy, rental income and collection rate remains uncertain until full socio- economic impact have been understood. Mashonaland Holdings emphasised that the impact would remain uncertain both in the short and long-term and cannot be accurately predicted. The respondents also mentioned that they are various elements at play that include legacy economic challenges other than COVID-19 that contribute to the performance of the sector. Zimre Property Investments stated that the long-term effects were hinged on the successful deployment and effectiveness of the vaccine such that it was early to determine the long-term effects until full knowledge has been gathered around the success rate of the vaccine overcoming the devastating effects of the virus.

4.7 Discussion of Key Findings

COVID-19 had both negative and positive effects that influenced business performance and in particular rental income, collection and occupancy. Rental collection rates and subsequently rental income was depressed in the second quarter compared to the third and fourth quarter owing to Level 5 of the national lockdown declared on 30 March 2020. Level 5 restricted movement of persons within a radius of 5 kilometres while Level 4, Level 3 and 2 and Level 1 had no severe movement restrictions. Additionally, Zimbabwe did not experience a prolonged period of Level 5 in 2020 compared to other countries such as China, America and Italy. The effects on the key performance indicators were consequently not acute considering that the formal sector was largely open during the period March to December 2020.

The sudden announcement of the lockdown resulted in companies failing to effectively collect rentals until the lockdown had been relaxed. It was discovered that several factors contributed to the low rental collections. From the landlord side, companies had not adequately prepared and adjusted business operations to embrace the "work from home" concept. Tenant information could only be accessed in property management systems and these were unfortunately not configured to be cloud based hence requiring them to be on the office premise to gain access. While on the side of the tenant, sales volumes had significantly decreased for tenants in the non-essential service sectors, distorting cash flows and consequently necessitating rationalisation of available funds, ultimately limiting their capacity to make rental payments.

In addition, differential effects of COVID-19 were observed across the commercial subsectors as some were in the essential and non-essential service sector, thus confirming the General Equilibrium Model which stipulates that the equilibrium point is offset in the short run beyond the directly affected sector. Tenants in the essential service sector remained open during the lockdown period and benefited from increased sales volumes due to reduced competition. Lease agreements based on turnover performed well compared to previous years. Companies that housed supermarkets, food outlets, hospitals and doctors' rooms, experienced a decline in collections ranging between 15-25%, while those that remained closed during the Level 5 lockdown period such as hotels had a significant decline in rental revenue of up to 50%.

In terms of occupancy, it was established that tenants retained space they occupied through the year. Further it was learnt that occupancy rate actually increased between 2-5% from the previous year as new tenants secured new space in the third and fourth quarter when normal activity was restored. The hotel sectors suffered low occupancy rates that declined to 5% in the second quarter but improved to 41% as 2020 closed. The overall occupancy rate remained depressed at 21% compared to other periods that had 55% in 2018 and 61% in 2019.

From a theoretical standpoint the above evidence indicates that indeed the Complexity Theory best describes a situation where companies actually register positive growth in the midst of a crisis. The theory points out that countries and economies are interconnected to each other such that if one sector is affected then all sectors along its value chain are also affected. This referred to as the “butterfly effect”. Further the theory mentions that these effects are not predictable and as such organisation spontaneously adapt to their environment and grow in the middle of chaotic situations such that the net effect of the crisis will be positive.

From an empirical point of view, Zimbabwe experienced low death rates compared to other countries and therefore it did not have prolonged Level 5 lockdowns hence the effects of COVID-19 were not dire. The country although under lockdown, business could operate in a normal way from the third quarter until year end.

Various factors contributed to the positive performance and these included a diversified portfolio structure where one sector would offset exposure of another, changes in the operating environment, demand and supply fundamentals that both strong and weak in some of the subsectors and internal processes and systems of the company and lastly Zimbabwe did not experience a prolonged period of the Level 5 lockdown compared to other countries.

The global prediction indicated that COVID-19 just like any other pandemic would cause havoc in the real estate sector and significantly result in negative growth of the key performance indicators. From the findings, it is clear that the effects of COVID-19 on the performance of commercial real estate sector in Zimbabwe had a net positive effect, explaining why companies listed on the Zimbabwe Stock exchange actually recorded an increase in rental income, collection and occupancy rate.

4.8 Chapter Conclusion

The chapter focused on the presentation of data collected through questionnaires and interviews undertaken in chart and tabular form. The Chapter provided an analysis and interpretation of the research findings in light of the objectives in Chapter one and the methods as outlined in Chapter three. The next chapter will dwell on summarising the whole study and recommendations.

CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

Chapter four focused on data presentation and analysis of the responses from the questionnaire survey and interviews from the four listed companies on the effects of the COVID-19 pandemic on the Zimbabwean commercial real estate sector. The results were linked to the relevant literature review from Chapter two and objectives from Chapter one.

This chapter will draw the conclusions made from the analysis of the findings meant to understand why Zimbabwe experienced positive growth under the impact of COVID-19 while pandemics are expected to have severe negative impact on economic activities at least in the short run. This chapter will also make recommendations in the context of theoretical contribution for further research, methodological and managerial recommendations in the field of commercial real estate.

5.2 Achievement of research aim and objectives

This section looks at the level of achievements of the research aim and objectives where each objective is examined. The main aim of the study was to explore and seek understanding on why Zimbabwe registered positive performance when the global trend indicated negative growth in terms of rental income, collection and occupancy rate. In examining the phenomena, the researcher outlined three specific sub objectives. The study was guided by the sub objectives that involved ascertaining the effects of the COVID-19 pandemic on rental income, collection and occupancy rate on the commercial real estate performance during the period March to December 2020.The study also looked at the causes of the changes in the rental income, occupancy and collection rate during the same period.

The objectives were achieved through gathering of relevant literature and from the qualitative data collected through use of primary and secondary data collection methods. The study made use of a questionnaire, interviews and document analysis to gather the relevant evidence required to meet the study objectives.

5.3 Conclusion

Based on the findings presented in Chapter four, the study concludes the following:

5.3.1 Effect of COVID-19 on rental income and collection rate

The overall net effect of COVID-19 on rental income and collection rate was indeed positive. Real estate companies listed on the Zimbabwe Stock Exchange registered positive growth in the period March to December 2020. COVID-19 had differential effects on the commercial real estate sub sectors. Further the effects depended on the level of lockdown. The country was in Level 5 lockdown in the second quarter of 2020 that consequently also registered low rental collection levels and income. Nonetheless, the retail (essential service category), industrial and hospital sector in the second quarter and consequently the third and fourth, experienced a growth in sales turnover that ultimately had a favourable impact on turnover based leases. On the other hand hotel and office properties realised a decline in rental income in particular the hotel sector during the Level 5 lockdown period. All the same, the overall net effect as aforementioned on rental income and collection rate was positive.

5.3.2 Effects of COVID-19 on occupancy rate

From the results in Chapter four, COVID-19 had significant negative effects on the hotel sector that recorded a decline of 56% in occupancy rate in the second quarter of 2020 and an average of 30% for the period March to December 2020. In relation to other subsectors (retail, industrial, office) in the commercial real estate sector the, occupancy rates remained resilient through the period under study. Some of the companies registered a growth in occupancy of up to 4%. It was established that there are various factors that tenants considered before releasing space and these included the need to maintain a strategic location.

5.3.3 Causes of the changes in the rental income, occupancy and collection rate

It follows that although COVID-19 had effects on commercial real estate in Zimbabwe, the effects also depended on various underlying factors that include the level of lockdown, the structure of the company's real estate portfolio, its internal processes and systems, local demand and supply fundamentals and the operating environment . These factors cannot be looked at in isolation but contributed to the overall level of the effects of the pandemic on commercial real estate key performance indicators. Portfolios that were largely diversified were not significantly affected by the pandemic compared to companies that specialised in one asset class. Performance of one subsector would offset exposure of another sector. Further, indeed real estate being a derived demand, performance of the assets entirely relied on the level of production of sectors along its value chain.

5.4 Contribution

5.4.1 Theoretical contribution

The research provides another viewpoint on the effects of crises on the performance of the commercial real estate sector in the Zimbabwean context. The historical understanding is that crises tend to have negative effects on the performance of economic sectors in the short run. Nevertheless, by applying the Complexity Theory organisations quickly adapt to the new environment. In addition, the study makes an important contribution by exploring the effects of COVID-19 on performance of the commercial real estate sector. It is recommended for other researchers to adopt other theories of crises that can explain the behaviour of firms in a crisis situation.

5.4.2 Methodological contribution

The study employed a qualitative methodology that analysed the effects of crises on performance of economic sectors, however it recommends that researchers interested in pursuing the study to make use of a quantitative approach in determining the effects of the pandemic on the Zimbabwe real estate sector. In addition, the study by seeking to understand the underlying factors confirmed that phenomenologist philosophy can be appropriate to explore situations that are otherwise at face value viewed as abnormal.

5.4.3 Empirical contribution

From the results, the research puts forward an interesting notion that effects of crises can be uneven and vary from one sector to another and also from one country to another. These differential effects can in some instances result in a positive net effect on performance of economic sectors. The study sought to explore and understand the effects of the pandemic and not to apply generalised opinions on its effect on the Zimbabwe commercial real estate sector.

5.5 Policy recommendations

The role of government in the overall economy is known to all but not many studies have been outlining specific policy recommendations on sectors such as real estate. Government's role is to protect and ensure sustained growth of economic sectors. The study therefore implores government to implement policies that will not only progressively grow the real estate sector but and ensure sustained growth. The policy recommendations arising from the study can be summarised as follows:

Government should defer tax obligations for the commercial real estate sector, especially for the period where the country will be in a total lockdown that is Level 5 in particular. This is for the reason that the current applicable law presents a situation where tax is due from the point rentals are billed. Therefore, property companies are expected to pay tax even on uncollected amounts. That being the case with low rental collection rates the tax component strains the companies' income significantly affecting their cash flows and growth.

Alternatively, it is proposed that Government abolishes penalties for late payment of tax for the period April to June 2020 and in future, for the periods where the country would be in Level 5 lockdown. Government could use a discriminatory approach depending on the use of the property. For example no tax penalties for properties in the essential services retail and office sector as they can continue to operate in the lockdown period.

Lastly, Government should offer temporary tax relief for the hotel sector to ease the strain and pressure on the sector. The hotel sector strongly relies on tourism and with limited foreign tourists it is imperative to offer tax reliefs to avoid crippling its growth.

5.6 Managerial recommendations

The study reviewed the effects of COVID-19 on the Zimbabwean commercial real estate sector performance and concluded that there was a positive net effect for companies that were invested in all the various commercial real estate sub sectors. Real estate companies should therefore consider restructuring, rebalancing and diversification of their portfolios to help offset their exposure in one asset class. To add on, the companies should consider hastening the digitalisation of their processes to allow for cloud based systems where access to tenant information can be done from anywhere. The companies should also set aside a fund for enhancement of buildings to adjust to the new normal, this may include green retrofitting and also space configuration of residential properties to accommodate working from "home" concept.

5.7 Generalisation of findings

This study employed a case study research strategy thus excluded other property management companies not listed on the Zimbabwe Stock Exchange that include pension funds and administrators and private investors. The study also used a longitudinal approach to track events over the period March to December 2020, therefore the results may not be generalised for the country period outside the focus of the study.

5.8 Research limitations

Confidentiality limitation – The researcher could not get 100% feedback on the information requested via the questionnaire administered for data collection. The respondents were comfortable to discuss their responses to the questions in a face to face interview than documenting them as it would result in the breaching of their confidentiality contracts with their respective organisations. The researcher reassured the respondents that the data provided would be used purely for academic purposes.

Generalisation limitation- the research strategy adopted was a case study approach therefore the results cannot be generalised for the entire Zimbabwean real estate sector.

Lack of previous studies- There was no adequate published literature on the research on a global and local scale. Studies are still underway and most of the sources have note provided conclusions. The researcher had to adopt literature used in the study of other pandemics that have been historically experienced.

5.9 Areas for further research

It would be worthwhile to have studies that dwell on each property segment within the commercial real estate sector to ascertain in-depth effects of crises and further propose strategies that would help real estate companies overcome some of the challenges experienced in the face of a humanitarian crisis.

Additionally, the study highlighted that some of the subsectors underperformed as the pandemic affected the value chain. It is proposed that studies also look at the implications of the pandemic on the real estate value chain to ascertain the nature of the relationships and the extent to that they affect these assets.

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APPENDICES

COVER LETTER FOR ENTRY INTO AN ORGANISATION

March 2021

Dear Sir/Madam

RE: MASTERS IN BUSINESS ADMINISTRATION RESEARCH QUESTIONNAIRE

My name is Natsirai Nyahuye, a University of Zimbabwe student studying a Masters of Business Administration specialising in Management. May you please kindly assist me in carrying out my research on the impact of COVID-19 by answering the questions below .The purpose of this questionnaire is to gather information pertaining to the research topic entitled **"The effects of COVID-19 on performance of commercial real estate: A case study of real estate listed companies in Zimbabwe"** as a requirement for the completion of the aforementioned degree Programme. Your cooperation is greatly appreciated.

NB: The information you share will be solely used for academic purpose. No information acquired from you will be shared, published or cited without your express consent. After completion, please send me your completed questionnaire on my email address anitanyahuye@gmail.com.

Your cooperation will be greatly appreciated.

Yours faithfully,

Natsirai Nyahuye
MBA Graduate Student

APPENDICE A

QUESTIONNAIRE/INTERVIEW GUIDE

The effects of COVID-19 on performance of commercial real estate: A case study of real estate listed companies in Zimbabwe

Section A

General information

1. Name of Organisation…………………………………………..….
2. Title of the respondent…………………………………….……….
3. Years of experience in property management………………………..
4. Indicate your gender:

Male ☐ Female ☐

5. Identify your age group

21-30 ☐ 31-35 ☐ 36-40 ☐ 41-50 ☐ above 50 ☐

6. Level of Education

Certificate ☐ Diploma ☐ Bachelors ☐ Masters ☐ PhD ☐

Section B

1. What was your average annual rental collection and occupancy rate for your property portfolio in the period December 2018 – December 2020? Please indicate in the table below.

Year	Average annual rental per sqm	Average annual rental collection	Average annual occupancy rate
2018			
2019			
2020			

2. Kindly indicate in the table below, your average occupancy and rental collection rate for the period March 2020 to December 2020

Office

Month	March	April	May	June	July	August	September	October	November	December
Average Occupancy rate										
Average collection rate										

Retail

Month	March	April	May	June	July	August	September	October	November	December
Average Occupancy rate										
Average collection rate										

Industrial

Month	March	April	May	June	July	August	September	October	November	December
Average Occupancy rate										
Average collection rate										

Hotel

Month	March	April	May	June	July	August	September	October	November	December
Average Occupancy rate										
Average collection rate										

3. What factors would you say contributed to the movement in your occupancy and collection rate from March 2020 to December 2020?

………………………………………………………………………………………..…
……………………………………………………………………………………….
……………………………………………………………………………………….

4. In your own opinion, what major challenges in general (in order of severity) have been brought about by the COVID-19 pandemic? Please indicate to what extent the COVID-19 pandemic has affected your business operations by ticking in the box below

Item		Not impacted (1)	Slightly impacted (2)	Neutral (3)	Very impacted (4)	Extremely impacted (5)
1	Rental collections / cashflows					
2	Occupancy rates					
3	Rental charges for new leases					
4	Rental reviews for existing leases					
5	Space uptake by prospective new tenants					

7. What potential long-term effects do you foresee as a result of COVID-19 on the occupancy rate of your portfolio and the real estate sector a whole?
………………………………………………………………………………………
………………………………………………………………………………………

8. What potential long-term effects do you foresee as a result of COVID-19 on the rental collection rate of your portfolio and the real estate sector a whole?
………………………………………………………………………………………
………………………………………………………………………………………

Thank you for your time