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IMPACT OF COVID-19 PANDEMIC ON PERFORMANCE OF SMES IN ZIMBABWE: CASE OF SMES IN HARARE.

BY

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DEDICATION

I would like to thank the Almighty God for bringing me thus far.

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My sincere gratitude goes to my wife, Sharon Kwadingepi, and my family for their unwavering support and the sacrifice they made for the entire duration of this course. You were a great source of inspiration and I would not have done it without you.

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ABSTRACT

This study was hinged upon analysing how Micro, Small and Medium Enterprises (MSMEs) are affected in Zimbabwe by COVID-19 and to provide recommendations for mitigating the impact. The research objectives were fourfold; to determine the potential economic and financial impact of COVID-19 on SMEs in Zimbabwe; to determine the impact of COVID-19 on supply chains of SMEs; to establish factors which make SMEs highly vulnerable to the impact of COVID-19, and to suggest models that can be employed to manage the financial impact of COVID-19 on SMEs in Zimbabwe. The research proposed that COVID-19 and government response measures have had a negative impact on SME performance for the majority of SMEs. A pragmatism research philosophy was adopted. A mixed methods (abductive) approach was adopted. An explanatory research design with a mixture of qualitative and quantitative methods was adopted. A survey research strategy was adopted. The population of the study were 200 000 Harare SMEs owners/managers/accountants/supervisors. A sample of 383 was taken using the Krejcie and Morgan (1970) formula, with 360 being for questionnaires and 23 being for interview guide. Quota sampling and random sampling techniques were adopted. The response rate was 83.03%. SPSS was used for quantitative data analysis and Excel was used for presentation. The study concluded that for the majority of SMEs, Covid-19 has resulted in reduction of sales volumes, reduction of profit figures, increase in cost of doing business, shortage of working capital, difficulties in accessing liquidity and financial credit and has resulted in SMEs facing difficulties in meeting fixed and statutory financial obligations like wages, loan repayments and rent. The study also concluded that for the majority of SMEs in Zimbabwe, Covid-19 has resulted in a significant reduction in the demand of SMEs' non-essential products, significant increase in demand of essential products, significant disruptions in supply of materials and products and significant disruptions in supply of imported materials and products. The study further concluded small size of stocks, non-essentiality of products, high labour intensiveness and being on congested locations make SMEs more vulnerable to the effects of Covid-19. The study recommended that SMEs be flexible enough to be able to switch to the production of Covid-19 related essentials like face masks and sanitizers. Also, the SMEs were recommended to adopt the work-from-home strategy during lockdowns. The government was recommended to assist SMEs financially especially after lockdowns to allow them restock. Future researchers were recommended to use other methodologies like correlation, regression and ANOVA analysis, and to draw sample from other places in Zimbabwe apart from Harare, such as the rural areas.

Key words: Covid-19, performance; demand and supply

TABLE OF CONTENTS

DECLARATION ii

DEDICATION iii

ACKNOWLEDGEMENTS iv

ABSTRACT v

LIST OF FIGURES xii

LIST OF TABLES xiii

LIST OF APPENDICES xiv

CHAPTER 1 1

INTRODUCTION 1

1.0 Introduction 1

1.1 Background of the study 1

1.2 Statement of the problem 8

1.3 Overall research objective 9

1.4 Research objectives 9

1.5 Central research question 9

1.6 Research questions 9

1.7 Research proposition 9

1.8 Significance of the study 10

1.8.1 To the academia 10

1.8.2 To the SMEs sector 10
1.8.3 Policymakers 10
1.9 Delimitations of the study 10
1.10 Assumptions of the study 11
1.11 Abbreviations 11
1.12 Dissertation structure 11
1.12.1 Chapter 1 12
1.12.2 Chapter 2 12
1.12.3 Chapter 3 12
1.12.4 Chapter 4 12
1.12.5 Chapter 5 12
1.13 Chapter Summary 12
CHAPTER 2 14
LITERATURE REVIEW 14
2.0 Introduction 14
2.1 Theoretical literature 14
2.1.1 Pandemics and COVID-19 14
2.1.2 Theory of Evolution and Natural Selection 15
2.1.3 Transmission channels for the impact of Covid-19 17
2.2 Economic and Financial Impact of Covid-19 on SMES 17

2.3 Impact of covid-19 on demand-supply sides of SMEs 21

2.4 Factors making SMEs highly vulnerable to the ravages of Covid-19 24

2.4.1 Essentiality of services 24

2.4.2 Financial incapability 24

2.4.3 Location 25

2.4.4 Labour intensiveness 25

2.5 Other empirical literature on impact of Covid-19 on SMEs 26

2.6 Conceptual framework of the study 28

2.7 Research proposition 29

2.8 Research gap 30

2.9 Chapter summary 30

CHAPTER 3 31

RESEARCH METHODOLOGY 31

3.0 Introduction 31

3.1 Research objectives, questions and propositions 31

3.1.1 Research objectives 31l

3.1.2 Research questions 31

3.1.3 Research proposition 32

3.2 Research philosophy 32

3.3 Research approach 32

3.4 Research design 33
3.5 Research strategy 33
3.6 Research population 33
3.7 Sampling procedures 34
3.8 Sample size 34
3.9 Data sources 36
3.10 Research instruments 36
3.10.1 Questionnaire 36
3.10.2 Interview guide 37
3.11 Data collection procedures 38
3.12 Data validity and reliability 38
3.13 Data analysis and presentation 39
3.13.1 Quantitative Data Analysis and presentation 39
3.13.2 Qualitative Data Analysis and presentation 39
3.14 Limitations 40
3.15 Ethical considerations 40
3.16 Chapter Summary 41
CHAPTER 4 42
DATA ANALYSIS, PRESENTATION AND DISCUSSION 42
4.0 Introduction 42

4.1 Response rate 42

4.2 Reliability statistics 43

4.3 Demographics and background information of respondents 43

4.3.1 Level of education 43

4.3.2 Level of experience with SMEs 44

4.3.3 Level of authority within SMEs 45

4.3.4 Industry 46

4.5 Economic and financial impact of Covid-19 on SMEs – objective one 46

4.6 Impact of covid-19 on supply chain of SMEs 50

4.7 Factors making SMEs vulnerable to the effect of Covid-19 53

4.8 Confirmation or rejection of the research proposition 55

4.9 Chapter summary 56

CHAPTER 5 57

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS 57

5.0 Introduction 57

5.1 Research objectives 57

5.2 Summary of the research findings 57

5.2.1 Economic and financial impact of covid-19 on SMEs in Zimbabwe 57

5.2.2 Impact of covid-19 on supply chains of SMEs 58

5.2.3 Factors making SMEs vulnerable to the effects of SMEs 58

5.3 Conclusions....59
5.3.1 Economic and financial impact of covid-19 on SMEs in Zimbabwe....59
5.3.2 Impact of covid-19 on supply chains of SMEs....59
5.3.3 Factors making SMEs vulnerable to the effects of SMEs....60
5.4 Recommendations....60
5.4.1 Recommendations to SMEs....60
5.4.2 Recommendations to the government (Ministry of SMEs)....61
5.5 Recommendations for further study....61
REFERENCES....63

LIST OF FIGURES

Figure 2. 1: Conceptual framework 29

Figure 4. 1: Level of respondents 43

Figure 4. 2: Level of experience of participants with SMEs 44

Figure 4. 3: Level of authority of the participants 45

Figure 4. 4: SME industries 46

LIST OF TABLES

Table 3. 1: Research population.....34

Table 3. 2: Sample size.....35

Table 4. 1: Response rate.....42

Table 4. 2: Reliability statistics.....43

Table 4. 3: Economic and financial impact of Covid-19 on SMEs.....47

Table 4. 4: Impact of Covid-19 on the supply chain of SMEs.....50

Table 4. 5: Factors making SMEs vulnerable to the effects of Covid-19.....53

LIST OF APPENDICES

Appendix 1: Research Questionnaire For s Authorities 80

Appendix 2: Interview Guide For Smes Authorities 84

Appendix 3: Turnitin Report Results 85

CHAPTER 1

INTRODUCTION

1.0 Introduction

Covid-19 is a disease caused by the coronavirus. It was first discovered in Wuhan, in Hubei province of China in December 2019. It has now become a global pandemic that has caused devastations of varying extents in world economies (McKibbin and Fernando, 2020). This chapter looks at various introductory aspects. These include background of the study, the statement of the problem, the research objectives, the research questions, the significance of the study, the delimitations of the study, the assumptions of the study, the limitations of the study, the definition of key terms and the structure of the dissertation.

1.1 Background of the study

The risk of infectious diseases can no longer be thought of exclusively in terms of rare but devastating events like global influenza pandemics (Atkeson, Kopecky & Zha, 2020). Potentially catastrophic outbreaks may only occur every few decades, but highly disruptive regional and local outbreaks, such as the 2014 Ebola virus crisis in West Africa, are becoming more common and pose a major threat to lives and livelihoods and economic growth (Andree, 2020). Moreover, despite considerable progress, the world remains ill-prepared to detect and respond to outbreaks and is not prepared to respond to a significant pandemic threat. Outbreaks and epidemics are also causing more economic damage when they occur (Anderson et al., 2020). Recent work on pandemics suggests that the potential economic losses from outbreaks of infectious disease are massive and similar in magnitude to the annual impact of climate change.

Framing economic losses on a global scale, however, has major drawbacks – it can make the problem seem too large to solve, and it conceals how impacts are distributed across geographic areas and economic sectors (Aum, Lee & Shin, 2020a). Among businesses, the risk of infectious disease is rarely emphasized in their considerations of risk. If large enterprises fully appreciate the commercial threat, they will no longer be able to justify remaining on the side-lines of efforts to strengthen global health security (Aum, Lee & Shin, 2020b).

On about the 100th anniversary of the 1918 influenza pandemic, it is tempting to believe the world has seen one of the worst pandemics, the Covid-19 novel coronavirus diseases (World Economic Forum, 2019). However, with increasing trade, travel, population density, human displacement, migration and deforestation, as well as climate change, an era of the risk of epidemics continues. The number and diversity of epidemic events has been increasing over the past 30 years, a trend that is only expected to intensify (World Economic Forum, 2019).

The year 2019 ended with a sense that the global economy was in for a turbulent 2020 (Baker et al., 2020). Tensions between major trading powers were on the rise, there continued to be concerns about inequality within and between countries, and climate change remained high on the agenda, ranking as the top global business risk in a 2019 survey of insurance industry experts (Baker, Bloom, Davis & Terry, 2020). Global debt was reaching record levels and rapid technological change was disrupting the way that goods and services were produced, traded and consumed. Most governments are gearing up to prepare their main stakeholders' micro, small and medium-sized enterprises (MSMEs) for the challenges ahead (Balla-Elliott, Cullen, Glaeser, Luca & Stanton, 2020). It was not expected, however, that a major crisis would hit so rapidly, and that it would be so different from anything experienced in this century thus far (Balla-Elliott, Cullen, Glaeser, Luca & Stanton, 2020). Improve referencing when the number of authors are more than 3.

The novel coronavirus was first reported as a cluster of cases of pneumonia of unknown cause in Wuhan City, Hubei Province of China on 8 December 2019 (Baunez, Degoulet, Luchini, Pintus & Teschl, 2020). Since then, the virus and Covid -19, the disease that it causes, has spread fast across the globe, including Zimbabwe. Due to the fast spread of the disease, in terms of both casualties and geographic coverage, the World Health Organization (WHO) declared the coronavirus outbreak a public health emergency of international concern on January 30, 2020, and thereafter, a pandemic on March 11, 2020. Being a novel disease, there are certain epidemiological features that remain unclear and as such it is not possible to determine, with certainty, how the pandemic will evolve (Binder, 2020). This research presents a preliminary assessment of the economic impacts of the COVID -19 on Zimbabwe SMEs (you have not defined this acronmy)on the basis of some known and observable facts as opposed to a detailed and robust analysis. It identifies the possible impact transmission channels based on the structure of Zimbabwean economy, its geography and socio-political factors; the possible

effects on Zimbabwean socio-economic development; and proffers some policy recommendations.

The COVID-19 pandemic is an unprecedented global crisis, affecting human health and economic welfare across the globe (Briscese, Lacetera, Macis & Tonin, 2020). It is first and foremost a health crisis, with governments around the world taking measures to prevent the spread of the virus. Yet the pandemic has also resulted in a planet-wide economic slowdown, affecting trade, investment, growth and employment (Chang & Velasco, 2020). The World Trade Organization estimates that world merchandise trade in 2020 could fall sharply, between 13% and 32%. Estimated global losses in GDP growth currently hover around 5 percentage points (Chang & Velasco, 2020).

By the time of writing this chapter, the WHO reported coronavirus related deaths had exceed 2.48 million globally, with a total of 112 million infections (WHO, 23 February 2021). The UNTAD (2021) expects that, due to the coronavirus, the global economy is expected to contract by a staggering 4.3 per cent in 2020 (Chatterji & Li, 2020). Millions of jobs have already been lost, millions of livelihoods are at risk, and an estimated additional 130 million people will be living in extreme poverty if the crisis persists (Chiou & Tucker, 2020). These are grim figures that reflect the immense challenges and human suffering caused by this pandemic. Nor is an end to COVID-19 yet in sight (Chiou & Tucker, 2020). In many countries, the number of new COVID-19 cases is rising at an alarming rate and, for many, a second wave is already an unwelcome reality. Much uncertainty remains about how and when the pandemic will run its course, but the unprecedented economic shock generated by the global health emergency has already sharply exposed the global economy's pre-existing weaknesses, severely setting back development progress around the world (Coibion, Gorodnichenko & Weber, 2020a).

Although the pandemic has affected every corner of the world, the economic earthquake unleashed by COVID-19 does not affect everyone in the same way (Brynjolfsson, Horton & Ozimek, 2020). With fewer resources to ride out the storm, MSMEs have been particularly vulnerable to the repercussions of the crisis. These firms in developing countries will be disproportionately affected, especially in Africa, least developed countries and Small Island developing States (Dave, Friedson, Matsuzawa, McNichols & Sabia, 2020a). Small businesses active in trade tend to be more competitive and resilient. Yet many of them have been shaken by serious disruptions in international supply chains (Dave, Friedson, Matsuzawa, McNichols & Sabia, 2020b).

Given the rapid spread of COVID-19, countries across the World have adopted several public health measures intended to prevent its spread, including social distancing (Fong et al., 2020). As part of social distancing, businesses, schools, community centres, and non-governmental organization (NGOs) have been required to close down, mass gatherings have been prohibited, and lockdown measures have been imposed in many countries, allowing travel only for essential needs (Cui, Heal & Kunreuther, 2020). The goal is that through social distancing, countries will be able to "flatten the curve", i.e., reduce the number of new cases related to COVID-19 from one day to the next in order to halt exponential growth and hence reduce pressure on medical services (John Hopkins University, 2020a). The spread of COVID-19 is expected to result in a considerable slowdown of economic activities. According to an early forecast of the International Monetary Fund (2020a), the global economy would contract by about 3 percent in 2020. The contraction is expected to be of far greater magnitude than that of the 2008-2009 Global Financial Crisis. However, in its latest update (June 2020), the International Monetary Fund (2020b) revised the forecast to 4.9 percent contraction in 2020. The report cites the following reasons for the updated forecast: i) greater persistence in social distancing activities; ii) lower activity during lockdowns; iii) steeper decline in productivity amongst firms which have opened up for business; and iv) greater uncertainty. The economic implications will be wide-ranging and uncertain, with different effects on the labour markets, production supply chains, financial markets, and the World economy. The negative economic effects may vary by the stringency of the social distancing measures (e.g., lockdowns and related policies), its length of implementation, and the degree of compliance. In addition, the pandemic and the government intervention may lead to mental health distress, increased economic inequality, and affect some socio-demographic groups particularly adversely (Demirguc-Kunt, Lokshin & Torre, 2020).

Country profiles, specially designed for this edition (be specific) and available for 85 economies, provide a detailed forecast of how the lockdowns in China, Europe and the United States will affect international supply chains (Dingel & Neiman, 2020). The economic effects of health crises and lockdowns at home and abroad have been devastating. Findings from global COVID-19 Business Impact Survey (2020), suggest that one in five small firms may go bankrupt within three months. For every bankruptcy, closed store, unpicked crop or drop in online orders, people will lose jobs and families will, in many cases, lose their only income. For Africa which should be creating 12 million–15 million jobs annually to keep up with a growing population the implications of these employment figures could be catastrophic (Fetzer,

2020). And Africa risks USD2.4 billion worth of exports loss in 2020 due to factory shutdowns abroad, as the new supply chain methodology estimates (Fetzer, 2020).

Covid-19 has had varied impacts on small-to-medium business enterprises (once an acronmy has been introduced, used it)across the globe. In another study by the International Trade Centre (2020) across the globe, the COVID-19 pandemic has had an immediate and negative impact on foreign direct investment (FDI) in 2020. The outlook remains dire, with further deterioration projected in 2021. The exceptional global circumstances as a result of the pandemic led to delayed implementation of ongoing investment projects and the shelving of new projects, as well as the drying up of foreign affiliate earnings of which normally a significant share is reinvested in host countries (Harris, 2020a). As a result, global FDI flows are forecast to decrease by up to 40 per cent in 2020, from their 2019 value of close to USD1.6 trillion (International Trade Centre, 2020). This would bring FDI to below $1 trillion for the first time since 2005. FDI is projected to decrease further in 2021 and only begin to recover in 2022 at the earliest. Following the outbreak of COVID-19, FDI was instantly struck by the lockdown. However, some investment expenditures continued (e.g. the fixed running costs of projects), but other outlays were blocked. Announcements of Greenfield projects were shelved. Similarly, many mergers and acquisitions were either temporarily suspended or cancelled. Regulators in the United States and Europe reported delays in approval processes for some planned mega-mergers (Hassan, Hollander, van Lent & Tahoun, 2020).

According to International Trade Centre (2020), China, the European Union and the United States are not only the largest exporters in the world, they are also major players in global supply chains, and therefore important importers of raw materials, parts and components. Lockdowns in these three economies not only affect domestic business – they also affect firms in partner countries and even companies in third countries that have no direct trading relationship with China, the EU or the United States (International Trade Centre, 2020).

A study by Fairlie i (2020) in the US revealed the first estimates of the early-stage effects of COVID-19 on small business owners from April 2020 CPS microdata. His study found that the number of working business owners plummeted from 15.0 million in February 2020 to 11.7 million in April 2020 because of COVID-19 mandates and demand shifts, representing a 22 percent drop. The drop in business owners was the largest on record, and losses were felt across nearly all industries and even for incorporated businesses. African-American businesses were hit especially hard experiencing a 41 percent drop. Latinx business owners fell by 32 percent,

and Asian business owners dropped by 26 percent. Simulations indicate that industry compositions partly placed these groups at a higher risk of losses. Immigrant business owners experienced substantial losses of 36 percent. Female-owned businesses were also disproportionately hit by 25 percent. These findings of early-stage losses to small businesses have important policy implications and may portend longer-term ramifications for job losses and economic inequality. Another study by Islam, Jannat, Al Rafi and Aruga (2020) sought to analyse the potential economic impact of the COVID-19 pandemic on South Asian economies using a systematic review approach. The cause-effect relationship framework showed that the outbreak of COVID-19 slowed down the gross domestic product (GDP) along with major economic sectors and indicators in the South Asian economies. The short and long-run predicted scenario showed that, compared to the agriculture sector, the service and manufacturing sectors will be affected more seriously in all South Asian countries. It was found that governments in the region are trying their best to adopt and implement expansionary fiscal strategies to combat this situation.

In Africa, some studies have already been carried out on the impact of COVID-19 on small businesses. A report by Worldometer (2020) established that in South Africa, the response to covid-19 by the government, which includes the lockdowns has had serious implications on businesses. Its study made a comparative analysis with other African countries, particularly Nigeria, where little support has been given to businesses by the government in comparison with South Africa. The study established that covid-19 has had financial, marketing and social impact on businesses, including loss of staff, disruption of supply chains, loss of customers and sales, high storage costs and overall loss of business. In a similar study by Han, Harris and Luedi (2020), it was established that covid-19 induced lockdowns has had negative consequences on the global economy, although it is one of the good measures to save lives. They established that as the virus spread across the world, it has become clear that measures restricting trade of essential goods have severely limited access to these products for the most vulnerable, particularly for poor African countries relying mainly on imports. Their study found the closure of borders by supplying/exporting products to other nations as having highly negative consequences on business viability especially for SMEs on the informal sector which most African governments have ordered to temporarily shut down. In another study by the SHRM (2020), 26% of SMEs in Ghana indicated that due to the coronavirus and the lockdowns, they can only be able to sustain operations for a limited period of time, of which they expect to totally close business.

Zimbabwe is one of the economies that has introduced a various response strategies to curb the spread of cov-19. On 30 March 2020 (be consistent in writing dates), Zimbabwe introduced its 21-day lockdown, where it ordered that only the registered companies offering 'essential' services were excluded from the lockdown (WHO, 2020). Those who would be officially allowed to continue operating would issue necessary documents confirming that an individual is one of their workers, so that law enforcement agencies would allow such employees to go to work (MoHCC, 2020). However, as a nation, Zimbabwe has a larger informal sector than the formal sector, hence the lockdown caused a lot of economic consequences to the informal sector. Some of the business allowed their employees to work from home, for example, using computers. With a declining trend in the number of confirmed cases, the government ended up easing its lockdown restrictions and enforcement, which then resulted in most of the informal businesses opening up (Chiripanyanga, 2020). With the coming of the second wave of the covid-19 towards the end of 2020, the government re-introduced a one month lockdown starting on January 2021, whereby only the essential services would continue to operate. Upon expiration, the lockdown was then extended by a further two weeks, which was also further extended by another two weeks upon expiration. The current lockdown is intended to end on 28 February 2021 (be consistent in the manner in which you write dates: refer to the earlier pages). One other restriction is on business opening hours, which was between 0800 hours and 1500 hours for the first five weeks from January 2021, which has now been changed to 0800 hours to 1700 hours (Mangwiro, 2021). The government expects that all companies operating need to follow all guidelines as stipulated by WHO, including sanitising of hands, social distancing, testing of employees and wearing of face masks. Some entrepreneurs and employees in Zimbabwe claim that since the March 2020 lockdown, their businesses have not managed to open until this day (Hove, 2021). Reasons for this are quite variable. Whether there are any prospects for such businesses to re-open in the future or there isn't, it is not certain. No special support has been given by the government to businesses, such as testing kits, sanitizers, money and other necessities (Chiripanyanga, 2020). The overall impact of covid-19 and the response measures taken by relevant authorities on the micro, small and medium enterprises (use acronmy) in Zimbabwe has not yet been empirically established. This is what this researches seeks to dwell on.

While predicting where and when the next outbreak will occur is still an evolving science, it is possible to identify factors that make companies vulnerable to financial losses from infectious disease events (He, Pan & Tanaka, 2020). Factors such as the geographic location of a

company's workforce, customer base and supply chain, and the nature and structure of its business, can help inform estimates of its vulnerability to disease outbreaks (WHO, 2020). Outbreaks of infectious disease may be inevitable, but the economic damage they cause is not. Helping companies to properly understand these risks will enable them to reduce their exposure, improve their resilience and deliver on key opportunities for public-private cooperation to strengthen global health security (UNTAD, 2020). In doing this, companies not only act in their own commercial interests, but also help mitigate the potentially devastating impacts of infectious disease, in both human and economic terms (Maloney & Taskin, 2020).

1.2 Statement of the problem

MSMEs play a crucial role for economic development of African countries. They are a vital engine in African economy, since they drive growth, create employment especially among youth and spearhead innovation. They provide a customer base to larger companies across the supply chain and supply vital goods and services to companies and households, helping to keep the wheels of the economy in motion. In addition, they can leverage their agility to design and incubate new technologies and business models to build a better future. Many of Africa's MSMEs have the potential to become tomorrow's large corporations that the continent needs to continue on its path to growth and prosperity. From a trade perspective, intra-African trade is not likely to improve if factors that inhibit the participation of MSMEs are not addressed. From the foregoing MSMEs are key elements for the successful implementation of the Africa Continental Free Trade Area (ACfTA).

However, many studies reveal that MSMEs growth in Africa are constrained among others by lack of financial support, poor management, corruption, lack of training and experience, poor infrastructure, and insufficient profits. They are currently highly exposed to the negative impact of the coronavirus disease (COVID-19). So, clearly, supporting their survival is crucial for mitigating the economic systemic impact, but also to sustain employment and to create the conditions needed for future growth, once the pandemic is over. The responses by governments to the coronavirus pandemic have had different implications on the operations of small businesses, in the formal and informal sectors. As highlighted by UNTAD (2020) different factors have resulted in the differing impacts that covid-19 has on businesses in different countries and in different industries. These factors include type of business (e.g., hospitality against retailing), population density, level of development, nature of government support, quality of healthcare facilities, socio-economic factors and other factors. The researches done

so far are not only outside Zimbabwe, but also outdated given that the pandemic is still prevalent. The key objective of this research is to analyse how MSMEs are affected in Zimbabwe by COVID-19 and to provide recommendation for mitigating the impact.

1.3 Overall research objective

Main objective is to examine the impact of coronavirus on SMEs in Zimbabwe

1.4 Research objectives

The research will seek to address the following research objectives;

i. To determine the potential economic and financial Impact of COVID-19 on SMEs in Zimbabwe
ii. To determine the impact of COVID-19 on supply chains of SMEs.
iii. To establish factors which make SMEs highly vulnerable to the impact of COVID-19
iv. To suggest models that can be employed to manage the financial impact of COVID-19 on SMEs in Zimbabwe

1.5 Central research question

What is the impact of coronavirus on SMEs in Zimbabwe?

1.6 Research questions

i. What are the potential economic and financial impacts of COVID-19 on SMEs in Zimbabwe?
ii. What is the impact of COVID 19 on SMEs supply chains in Zimbabwe?
iii. What factors make SMEs highly vulnerable to the impact of COVID-19?
iv. What model (s) can be employed to manage the financial impact of COVID-19 on SMEs in Zimbabwe?

1.7 Research proposition

The research proposes that COVID-19 and government response measures have had a negative impact on SME performance for the majority of SMEs.

1.8 Significance of the study

The study will be of value to various stakeholders as discussed below;

1.8.1 To the academia

The findings of this study identify research gap which further studies can focus on. This study serves as a reference for other researchers in related area. Thus, it can minimize the literature gap in the area of study particularly in Zimbabwe. Results can be used as library material by the University of Zimbabwe for further references and studies.

1.8.2 To the SMEs sector

In addition, this study will initiate the SMEs disaster management plan to give due emphasis on the management of these identified variables and provides them with understanding of activities that will enhance their profitability and survival post COVID-19 pandemic. Thus, this study made the management body to visualize the impact of COVID-19 on the performance of SMEs.

1.8.3 Policymakers

The findings of this study on the impact of COVID-19 on SMEs performance will be beneficial to different stakeholders, since such investigation has policy implication, the finding of this study might be used as a direct input in developing disaster recovery plans and standards regarding the SMEs in Zimbabwe. The government of Zimbabwe through its relevant ministries such as the Ministry of Health and Child Care and the ministries responsible for SMEs, can use the results of this study as empirical evidence or information needed for decision making regarding the nature of support needed by SMEs and the best covid-19 response mechanism that safeguard the welfare of SMEs.

1.9 Delimitations of the study: the research has already been undertaken. Hence your narrative must be in the past tense not futuristic.

The research will be carried out through studying the impact of COVID-19 on Zimbabwean SMEs sector performance. Given the resource and time constraints, research will be carried out on SMEs in designated industrial areas in Harare, the capital city of Zimbabwe and these SMEs

will cover various types of businesses. These include industrial areas in Msasa , Graniteside , Ardbennie , Willowvale and Southerton/Workington . Primary data is going to be collected. The questionnaire and interview guide shall be used for primary data collection from owners, managers and accountants in the SMEs. The study will focus on the period January 2020 to date.

1.10 Assumptions of the study

In carrying out the study, it was assumed that;

- That the covid-19 related lockdown restrictions will not significantly impact on the researcher's ability to collect data
- That the respondents will be willing to participate and will be truthful to the best of their experiences and knowledge
- That the empirical results of this study shall be valid even in future as the Covid-19 pandemic era progresses.
- That the current measures and nature of support given to SMEs by relevant authorities shall remain unchanged during the research project life.

1.11 Abbreviations

COVID-19 – Coronavirus Disease-19

SARS-CoV-2 - Severe Acute Respiratory Syndrome Coronavirus 2

WHO – World Health Organisation

This list of abbreviations is not exhaustive

1.12 Dissertation structure

The dissertation and topic under study will adopt the following format outline which will assist the researcher in clearly presenting an easy-to-follow argument that is acceptable to readers.

1.12.1 Chapter 1

This chapter introduces the research topic to the reader, provides the background of the study and also offers a justification for selection of the research area. It also explains the objectives of the research and provides the research questions as well as the structure of the research.

1.12.2 Chapter 2

This chapter reviews existing relevant literature on impact of Covid-19 pandemic on SME businesses with a view to exploring the relationship between the two. It also provides a critique of existing theoretical frameworks. and an analysis of what other authors have discovered or published on the research area.

1.12.3 Chapter 3

This chapter seeks to explain the research methodology process and the research philosophy employed in the study. It explains the research design, data collection methods and data analysis models that will be used. The chapter also looks at ethical considerations as well as sampling methods employed in the research.

1.12.4 Chapter 4

This chapter seeks to present the data collected using the methodology outlined in chapter 3, and also focuses on analysis and presentation of the data. It offers an in-depth comparison of the findings and the findings of past researchers and authorities as reviewed in the second chapter. The findings of the study are also discussed extensively in this chapter.

1.12.5 Chapter 5

This chapter covers the summary of the research, conclusions as well as the recommendations. It provides an assessment of the limitations of the research study and highlights the scope for future research in the same area.

1.13 Chapter Summary

This chapter introduced the background to the study, the research problem statement and contextualized these through evidently stated research objectives and questions. A discussion

of the significance of the study was made with emphasis on the contribution of this research to various stakeholders. The chapter went on to discuss the scope of the research in terms of the study focus, time, geographical limits of the research and methodology in brief. Lastly, the researcher outlined the research project outline. The next chapter looks at the available literature, both theoretical and empirical literature.

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

This chapter reviews literature on the concepts concerning the study of COVID-19 and its impact on SMEs. The focus of the review concentrates on the methodological and research outcomes of previous studies as well as a detailed review of theories highlighted by other scholars pertinent to the study of financial of political violence and terrorism The last part of the sentence does not sit well.

2.1 Theoretical literature

2.1.1 Pandemics and COVID-19

Pandemics are not new and have occurred at different stages in human history (Ferguson et al., 2020). While there have been many outbreaks and human catastrophes, there has been a notable rise in the frequency of pandemics from the year 2000 and thereafter. This is particularly due to increased emergence of viral disease amongst animals (Madhav et al., 2017). Given the rise in the frequency of pandemics, many researchers including Garrett (2007), Keogh-Brown et al. (2008) and most recently Madhav et al. (2017) and Fan et al. (2018) argue that a large scale global pandemic was inevitable. Ferguson et al. (2020) from the Imperial College London COVID-19 Response Team claim that COVID-19 is the most serious episode since the 1918 Spanish Influenza pandemic. Despite the comparisons, Barro (2020) concludes that the non-pharmaceutical interventions implemented during 1918 Spanish Influenza pandemic were not successful in reducing overall deaths. This was because the interventions were not maintained for a sufficiently long period of enough time. He estimates that the mean duration of school closings and prohibitions of public gatherings was only 36 days, whereas the mean duration of quarantine/isolation was 18 days (0.05 years). These numbers were quite small compared to the number of days that the 1918 Spanish influenza pandemic was active.

Pandemics are expected to have a severe negative impact on economic activities, at least in the short run. According to Jonas (2013), the impact ranges from:

i. avoidance reaction due to social distancing measures (e.g., individuals might forgo consumption and purchases of certain goods and services),
ii. small direct costs (e.g., hospitalization and medical costs),
iii. larger indirect costs (loss of labour, production), and
iv. Offsetting and cascading effects (disruption of services, travel and others). A number of studies tried to anticipate the economic loss from a pandemic.

For example, Jonung and Roeger (2006) forecasted that a hypothetical global pandemic would lead to 1.6 percent drop in GDP for the European Union (EU) due to both demand and supply side factors. Other studies analyze the impact with a historical comparison. For example, 'how would the casualty numbers during the 1918 Spanish Influenza pandemic transpire today?' Barro et al. (2020) estimate that holding everything else constant, the 2.1 percent death rate during the Spanish Influenza pandemic in 1918-1920 would translate to roughly 150 million deaths worldwide (compared to the world's population of about 8 billion in 2020) during COVID-19 pandemic. The authors also find that, on average, the 2.1 percent death rate corresponds to 6 percent decline in GDP and 8 percent fall in private consumption.

COVID-19 is one of the global pandemics. The World has been gripped by a pandemic over the first half of 2020. It was identified as a new coronavirus (severe acute respiratory syndrome coronavirus 2, or SARS-CoV-2), and later named as Coronavirus Disease-19 or COVID-19 (Qiu et al., 2020). While COVID-19 originated in the city of Wuhan in the Hubei province of China, it has spread rapidly across the world, resulting in a human tragedy and tremendous economic damage. By mid-June, there had been over 8 million cases of COVID-19 globally, with over 436,000 deaths. According to Zhu et al. (2020), the first pneumonia case was discovered on December 8, 2019 in a wet market in Wuhan, the capital city of Hubei Province of China. Afterwards, several clusters of patients with such pneumonia were reported throughout late December 2019.

2.1.2 Theory of Evolution and Natural Selection

This theory was propounded by Charles Darwin. Darwin imagined an organisation as an organism which has different systems and organs, as an organisation also has different departments and areas of specialisation. Darwin argued that the organism's genes have the role to define or determine the phenotype or physical expressions of the organism, just like in an organisation, corporate values, visions and missions define the organisation (Abubakari, 2016).

The theory further postulates that evolution by natural selection involves the environment influencing the manifestations of genes and selects certain traits from the organisms for survival. Those organisms with desirable traits that suit the environment will manage to survive, and those that are not well suited to the environment have less chances of survival. In an organisation setup, the environment includes both internal and external factors which dictate what organisations need to do in order to survive in the market. (acknowledge source of information)The outbreak of the covid-19 pandemic and various resolutions taken by the government in response to the covid-19 pandemic are exogenous or external environmental factors that dictate what organisations like SMEs need to do. In line with that, organisations either accordingly change their ways of doing things to suit the dictates of the business environment, or may struggle and then stabilise, or may struggle and die a natural death (Rokeach, 2015). Naturally, for example, SMEs in the hospitality industry are more affected by such pandemics as tourism and international travel may be banned, and the principles of natural selection imply that such SMEs have less chances of survival or succeeding in business than SMEs in the retail sector. Therefore, the theory of natural selection was taken to be related to this study in that the degree to which covid-19 and the restrictions related to the disease naturally impact on SMEs depends on a lot of factors, such as location (for example town A v. town B, urban v. rural, or country A v. country B), industry (e.g. hospitality industry v. retail industry or essential services v. non-essential services), nature of supply chains (e.g. imported vs. locally available raw materials) and nature of business (e.g. goods or services). Further, the ability to survive will also depend on the ability of each SME to adapt to the changes in the operating environment, besides being naturally in a certain industry in a certain country (for example, closing down business in line with lockdowns v. working from home). Naturally, organisations providing services are more easily able to improvise and work from home, than those that deal with physical goods. That natural difference means that one type of business is more susceptible to elimination from the market than the other. Overall, in line with the theory of natural selection, the extent of the impact of covid-19 on SMEs and their performance and survival may not be the same because of natural factors like industry, nature of products, essentiality of products (as defined by authorities) and country of operation. Therefore the theory was considered relevant to this study in explaining possible differences in the impacts of covid-19 on SME businesses.

2.1.3 Transmission channels for the impact of Covid-19

To understand the potential negative economic impact of COVID-19, it is important to understand the economic transmission channels through which the shocks will adversely affect the economy (Carlsson-Szlezak et al, 2020a). According to Carlsson-Szlezak et al. (2020a) and Carlsson-Szlezak et al. (2020b), there are three main transmission channels. The first is the direct impact, which is related to the reduced consumption of goods and services. Prolonged lengths of the pandemic and the social distancing measures might reduce consumer confidence by keeping consumers at home, wary of discretionary spending and pessimistic about the long-term economic prospects. The second one is the indirect impact working through financial market shocks and their effects on the real economy. Household wealth will likely fall, savings will increase, and consumption spending will decrease further.

The third consists of supply-side disruptions; as COVID-19 keeps production halted, it will negatively impact supply chains, labour demand, and employment, leading to prolonged periods of lay-offs and rising unemployment. In particular, Baldwin (2020) discusses the expectation shock by which there is a "wait-and-see" attitude adopted by economic agents. The author argues that this is common during economic climates characterized by uncertainties, as there is less confidence in markets and economic transactions. Ultimately, the intensity of the shock is determined by the underlying epidemiological properties of COVID-19, consumer and firm behavior in the face of adversity, and public policy responses.

2.2 Economic and Financial Impact of Covid-19 on SMES

The Covid-19 crisis has resulted in a sudden heavy impact on economic and labour market, affecting all businesses regardless of their sizes (Chirume and Kaseke, 2020). The public health response measures to contain the pandemic have shown that, while necessary, they have also led to a disruption of SMEs' economic activities, resulting in increased poverty and vulnerability (Craven, 2020). As the reality of the COVID-19 pandemic unfolds, and movement restrictions imposed, businesses around the world suffer, as they thrive on large volumes of human traffic (Chirume and Kaseke, 2020). These businesses include the food sector, hotel industry, transport sector, construction, retail, beauty and entertainment to name just a few. Boot et al., (2020), observe that most of the SMEs cannot afford to cover the cost of doing business under the current environment. Workers lose employment and firms are not able to pay salaries as earlier noted these developments compound the problem. There is also

shortage of working capital, explained in terms of consumer behaviour during this extra-ordinary epoch of the novel virus. Consumers tend to be extra careful with money, as they buy the most necessary goods to survive possibly extended quarantine periods (Bell et al, 2020).

Many SMEs have a lack of working capital in normal times (Lee et al., 2015; Psillaki & Eleftheriou, 2015). When SMEs were required to shut down for a month or longer due to government imposed Covid-19 restrictions, most Chinese SMEs had little to no available cash or cash flow to pay their recurrent expenses, such as rent, salaries, or interest on loans (Zhu, et al., 2020). In support of this claim, an empirical research by Lu, Wu, Peng & Lu, (2020) in China established that the impact of covid19 on SMEs is multifaceted. Their study was based on data collected from a questionnaire-based survey and interviews that were conducted in early February, 2020 in Sichuan Province. Their results showed that a significant number of the SMEs struggled to operate due to shortage of working capital and inventories to run their businesses after each lockdown. They established that because of covid-19, SMEs experienced reduced operating incomes and increased operating costs being the most direct effects. Reduced operating income was considered by most enterprises to be the main short-term impact. Over 80% of the SMEs experienced a decrease in operating income, especially in the tertiary industry, followed by increased operating costs and extended cash shortages, at 49.8% and 48.4%, respectively. The reduced employee re-work rate was a somewhat smaller concern even though it was cited as an important reason for enterprises being unable to resume work (Lu, Wu, Peng & Lu, 2020 make use of the et al. facility). Their study also established that nearly 60% of the SMEs claimed they would be unable to survive beyond 3 months under their current cash flow conditions, and 80% claimed that they would be unable to last beyond 6 months if the epidemic impacts continued. However, as only 25.1% judged that the epidemic impact on business operations would last less than 3 months, most SMEs felt that they would not survive the epidemic because of cash flow problems, that is, the longer the epidemic, the greater the number of likely SME closures.

Market demand is a significant guide for the survival and development of enterprises. Although SMEs are generally more dynamic and opportunistic than larger firms, they are also not immune to large contractions in demand for their goods and services (Cowling et al., 2015). Lee and Warner (2006) found that the SARS epidemic induced a demand shock and particularly affected consumption. The restricted physical movement and declining consumer confidence during and after the SARS outbreak led to a significant reduction in private consumption

spending, which led to a highly volatile and uncertain environment for the SMEs that required rapid adaptations to the changes in the market environment associated with the labour market, supply chains and customer demand. The market demand changes faced by different industries after disasters have been previously examined, from which it was found that retail enterprises experienced changed purchasing patterns in post-disaster phases, such as decreases in luxury goods consumption (Forbes, 2017; Zhang et al., 2009) and increases in low cost product consumption (Liu & Black, 2011). Chang & Berdiev (2013) also concluded that disasters were important determinants of insurance consumption, finding that the stimulation for the demand for insurance products varied depending on the disaster type.

In another study by Yasenov (2020) in Mexico, it was established that for most SMEs the effects of the pandemic are equally severe, as most of them cannot afford to cover the cost of doing business under the current environment. His study also found that a relatively high percentage of SMEs in the services sector in particular reported a decline in access to credit and financial liquidity compared to large businesses since the onset of covid-19. This trend as revealed by respondents may be because lending institutions already consider them highly risky, as those businesses are more likely to become insolvent if COVID-19 persists with restrictions maintained.

In agreement with Lu et al. (2020), Simonov et al. (2020) carried out a study in the Philippines on the impact of Covid-19 on SMEs. Their study established that the risk of employee infection and the subsequent economic consequences and legal liability, was the primary pressures faced by the SMEs over the short term, with 66.5% of enterprises identifying this as a key reason. However, capital chain and cash flow pressures were also high at 60.1%, but the secondary industry cash flow pressures were a little lower at 55.5%. Gaining new orders and ensuring product and service deliveries were two other main pressure sources. Around 60% of new economy sector enterprises cited getting new orders as their most severe problem. However, supply chain management was not found to be a major pressure, probably because enterprises were unable to resume work in the short term because of the need to ensure epidemic control, which result disagrees with the findings of Lu et al (2020) and Chirume and Kaseke (2020). As new economy enterprises are often very sensitive to market demand and because the Covid-19 epidemic made it difficult for enterprises to operate as usual, there was significant stress on their capital chains and cash flows.

Similar studies were also carried out in countries like Kenya and South Africa. A report by Worldometer (2020) in South Africa revealed that due to the sudden outbreak of the epidemic, most SMEs did not have sufficient cash reserves. As many of the SMEs interviewed had to close for 30 days or longer, they had little or no revenue. Further, because some consumption is seasonal, the SMEs in the tourism, retail, catering and transportation industries suffered losses that would be impossible to recoup after the epidemic is over. Although SME revenue was significantly affected, SMEs were still liable for their continuing fixed and statutory costs: rent, social security, employee salaries, debt principal and interest payments, logistics and storage fees, and refunds of advance receipt refunds. All of these costs increased their funding gaps and led to a further deterioration in cash flow.

Similar results were obtained from a study by Roser, Ritchie, Ortiz-Ospina & Hasell (2020), in which it was established in the UK that the SMEs sampled had less financial flexibility to withstand long-lasting disruptions. Taking the hospitality industry as an example, it was found in the interviews that most SMEs had not resumed work. While some hospitality SMEs had set up takeaway platforms, the reduced sales incomes were unable to meet the expenses associated with salaries, rent and other fixed costs. Some enterprises also complained that the excessively high online service fees (a maximum of 21%) was difficult for online catering enterprises. Hospitality SMEs, therefore, were facing rent and employee wage pressures, with one interviewed business owner stating that rent accounted for 10% of the business's turnover.

Another study was carried out by Dai et al. (2020) in China and it was established that due to covid-19, export firms suffered more than non-export firms because they tended to employ more migrant workers and their suppliers were highly concentrated. By linking the follow-up phone survey with the ESIEC baseline survey, we who is we? grasped information about employment and share of workers from outside the province. Their survey found that export firms were generally larger than non-export firms. On average, an export firm employed 22.4 workers, while non-export firms averaged 17.4 workers. Moreover, export firms relied more heavily on migrant workers from outside the home province than did non-export firms. Migrant workers accounted for 53.7 percent of total employees in export firms, compared to 34.8 percent of employees in non-export firms. Thus, the restrictions on labour mobility imposed by local governments after the outbreak of COVID-19 hit export firms much harder than non-export firms in February. According to their February survey, 58.7 percent of export firms faced labour shortages, 25.5 percentage points higher than non-export firms.

As recommendations, various authors gave varied recommendations to SMEs and government in relation to the financial impact of pandemics on SME performance. To ensure business continuity for enterprises throughout disruptions (Castillo, 2005), it is important to retain revenue streams. Therefore, SMEs could draw on savings to prevent revenue interruptions and pay daily expenses during a shutdown period when there is little income. Based on a reef tourism case in Phuket, Thailand, Biggs et al. (2012) found, for example, that available savings were one of the three most important survival factors reported by formal enterprises. Khan and Sayem (2013) also suggested that more substantial savings could mean that SMEs had lower risks when disasters strike. For enterprises that have no cash flow and no savings, government support during a crisis is important to ensure SME survival and recovery (Biggs et al., 2012) as in addition to providing loans, governments can implement spatially targeted tax incentives to promote post-disaster revitalisation and encourage business reinvestment to help ease the pressure on SME capital chains (Gotham, 2013).

2.3 Impact of covid-19 on demand-supply sides of SMEs

Baccini & Brodeur (2020) carried out a study in the United States and found out that because of covid-19, the demand especially for 'non-essential' products and services have reduced. They established that customers normally panic when lockdowns are imposed by the government, and they buy and stock large quantities of essential products in anticipation for shortages during lockdowns. This may create a temporary opportunity for SMEs selling such products with highly inelastic demand such that they can afford to temporarily raise prices. However, the United States regards such business practice as illegal. According to this study by Baccini & Brodeur (2020), the rise in demand is very temporary as it is followed by a disproportionality longer period of falling demand as customers will have stocked their products. For products regarded as non-essential, like tourism and recreation, the demand for such products falls as soon as lockdowns are effected (Baccini & Brodeur, 2020).

SMEs commonly have to deal with disrupted supply chains after disasters, which often results in substantially reduced production (Wedawatta and Ingirige, 2012). To take same examples, Wedawatta and Ingirige (2012) found that many SMEs had not considered how floods could affect their supply chain. Prasad et al. (2014) concluded that micro enterprises were less able to cushion supply chain disruptions and less likely to obtain disaster aid. Tokui (2017) found that after the 2011 Great East-Japan Earthquake, enterprises suffered significant damage from the supply chain disruption forward linkage effects. Supply chain interruptions can also delay

business recovery after disasters. In a study on short-term business recovery following the 1994 Northridge earthquake, Dahlhamer and Tierney (1998) found that the disaster induced business recovery problems were related to difficulties in getting the supplies and materials needed to run the business. Recovery processes and outcomes are affected not only by direct disaster induced impacts on the SMEs, but also by longer-term problems, which can include extended periods of business interruption and difficulties in supplying or receiving products/raw materials (Tierney, 2007).

A study undertook by Juergensen, Guimón and Narula (2020) revealed interesting results on the demand and supply side impacts of covid-19 on European SMEs. On the supply side, their study revealed that SMEs have faced logistical issues due to the disruption of transportation and labour shortages. On the demand side, it was established that European SMEs have seen their demand decline substantially due to lockdown measures, a drop in consumer confidence and the shutting down of a number of GVCs in affected industries. However, the results further alluded that the severity of these demand and supply shocks is likely to differ according to whether the firm is a stand-alone, a specialized-supplier or a knowledge-based SME. They also concluded that importers of raw materials suffered greater losses than those that rely mainly on local resources.

In other studies in other European countries, it was established that the Covid-19 pandemic represents an external shock of unprecedented magnitude, affecting European SMEs on the supply and demand sides alike. For example, survey data from May 2020 suggest that 41% of UK SMEs had stopped operations and 35% feared they would be unable to reopen again (FSB, 2020). In Germany, 50% of SMEs expected a negative effect due to the crisis with one-third anticipating a decline in revenues by more than 10% (DIHK, 2020). In Italy, more than 70% indicated they were directly affected by the crisis (CAN, 2020). While SMEs in other European countries have voiced similar concerns (OECD, 2020), these firms are also highly heterogeneous along several dimensions. For example, in the context of the 2008 global financial crisis, Cowling et al. (2018) found that larger, established SMEs in the UK were more affected than smaller, younger SMEs. The latter were more agile and speedy in responding to the crisis, while older firms were not. From these results, one can actually note that, while external shocks affect all SMEs to some extent, it is the actual impacts on individual or groups of SMEs may differ.

Similar studies in some African countries were done. In South Africa, the results obtained by Worldometer (2020) revealed that the pandemic led to a nationwide shut down that blocked transportation across the country, asynchronous work resumption on upstream and downstream industrial chains and cross-provincial and cross-regional logistics difficulties significantly impacted supply chains. The supply-demand relationships in some industries was profound; for example, SMEs in the vacation industry, such as accommodation and catering, education, culture, sports, and entertainment were directly and severely impacted, which was being gradually transmitted to the supply industries upstream. The interviews they conducted revealed that some of the SMEs engaged in concentrated farming in rural areas had been experiencing a significant decline in orders because of the collective 'shutdown' of the hospitality industry. In a similar study conducted in Kenya by Narula (2020), it was established that SMEs relying on the importation of goods have generally shut down due to the restricted movement of goods and people across borders as responses to the covid-19 pandemic. Her study also established that internal movement of finished goods and inputs has severely been disrupted for most SMEs.

In a related study, Gourinchas (2020) obtained that difficulties in obtaining commercial credit is a common problem faced by the interviewed SMEs, who indicated that they would be unable to build up their finished goods inventory or to stock up on raw materials to protect against supply chain disruptions. The results indicated that the interviewees fear that if the upstream suppliers were unable to resume production, this disruption in the supply chain could prevent many downstream SMEs from restarting. Therefore, a slight move in one section of the supply chain could severely affect the situation as a whole, and problems in any link in the industrial chain such as agricultural product transportation, agricultural materials supply, processing and sales could affect the whole supply chain, which meant that the collapse of individual enterprises could lead to general enterprise collapses across the industrial supply chain. This was particularly the anxiety of the interviewed SMEs in agriculture and manufacturing enterprises. The impact on the SMEs would be even more severe if the supply chains failed to recover (Gourinchas 2020).

From the arguments, claims and empirical findings of scholars in this section, one can actually infer that Covid-19 has had varying impacts on different SMEs in different jurisdictions. These variations come in terms of the industry, the supply chains of the SMEs, government policies and the elasticity of demand for the products and services.

2.4 Factors making SMEs highly vulnerable to the ravages of Covid-19

This section reviews factors making SMEs highly vulnerable to the impact of covid-19. From literature, the factors found range from industry, location, essentiality of services, financial capabilities and supply chains.

2.4.1 Essentiality of services

According to a study by Andersen, Schröder & Svarer, (2020), it was established that although the countries (European) under study had implemented lockdowns on different dates with differing but highly similar restrictions as responses to the Covid-19 pandemic, all governments have been careful in exempting businesses providing 'essential products' from the restrictions. The most common products exempted included banking services, retailing, security services and manufacturing of essential products. As a result, most SMEs specialising in 'non-essential services' as defined by the responsible authorities or governments have been found to be more susceptible to suffer more from the ravages of Covid-19. Worldometer (2020) also claimed that most informal SMEs especially in poor countries have largely suffered from Covid-19 as they have been forced to definitely or indefinitely close business due to reasons to do with non-essentiality of services.

2.4.2 Financial incapability

Avdiu & Nayyar (2020) did a study in Thailand on the impact of covid-19 on the SMEs. It was established that 43% of the surveyed SMEs cited financial problems when it comes to continuation or resumption of business during or after lockdowns. The study established that during lockdowns, most such SMEs are not capable of adopting new methods like working from home, citing financial challenges relating, for example, to internet connection and computer accessories. A study by Chirume and Kaseke (2020) in Chinhoyi area in Zimbabwe showed that most SMEs have cited financial challenges as a result of the lockdowns, such that they are no longer able to pay workers, to meet the storage costs of some special inventories and to implement the work-from home strategies due to high costs of internet data needed. They also claimed that the government of Zimbabwe requires that companies opening during covid-19 be able to follow guidelines provided by the WHO (2020), which include social distancing, testing of employees and sensitisation of employees, of which some SMEs may not be able to implement such measures given financial constraints. Juergensen et al. (2020)

pointed out that most of the importing SMEs may lack own transport when importing their products, which makes them vulnerable in the time of covid-19. Further Baccini & Brodeur, (2020) established that SMEs are more vulnerable to Covid-19 as they have little or no collateral to source capital support from lending institutions. In the majority of cases they lack assets that can be disposed of, or that can be used as collateral for new credit lines. These factors make them more vulnerable and exposed to liquidity squeeze, and this results from the fact that SMEs cannot produce and thus cannot sell their own products as desired to their end markets due to the pandemic. However, they still have to pay all their fixed costs, such as the rent, the salaries, taxes, and their suppliers as well.

2.4.3 Location

A claim was made by Chirume and Kaseke (2020) that in a bid to avoid crowding and ensure social distancing, lockdowns were put to decongest working places, work places and social places. Most of these SMEs are usually located in urban areas where population densities are usually high, attracting various customers from all social classes, resulting in crowded marketplaces. As a result, such locations become major targets by government in decongesting places in order to reduce the spread of Covid-19, which leads to closure of many SMEs (Chirume and Kaseke, 2020). This claim is substantiated by the empirical results obtained by Worldometer (2020) which established that most of the areas where SMEs are concentrated have been closed down by the governments in their bid to reduce the spread of the SARS CoV-2 coronavirus.

2.4.4 Labour intensiveness

Most SMEs are more labour-intensive than other companies and therefore more exposed to disruption, especially when workforces are in quarantine, as is happening in several countries (Avdiu & Nayyar, 2020). To prevent the spread of Covid-19, most governments want to restrict the movement of people from one place to the other, hence more labour intensive organisations face challenges in having their employees come to work (Aum, Lee & Shin, 2020a). When forced to close down business for some time, such SMEs find it more difficult to adopt the working from home strategy due to the nature of their work and the available resources (Aum, Lee & Shin, 2020a).

2.5 Other empirical literature on impact of covid-19 on SMEs

The insights on African businesses' reactions and outlook to COVID-19 is the first comprehensive survey on the COVID-19 (this was covered on the section of abbreviations) pandemic and its economic impacts across Africa. It takes stock of the impact of COVID-19 on businesses and trade, and identifies the challenges faced and responses made by businesses. The survey was jointly developed and carried out by theATPC) of the United Nations Economic Commission for Africa (UNECA) and International Economics Consulting Ltd. The survey was administered online for one week, from 14 to 20 April 2020. The results are based on 337 responses and 210 fully completed questionnaires, with each respondent representing an enterprise that operates in 1 and/or all 54 African countries, and disaggregated as: 76 micro enterprises, 59 small sized enterprises, 42 medium sized-enterprises and 33 large enterprises.

Four fifths of the respondents indicated being significantly affected by the current COVID-19 crisis (rating the effect as highly severe or severe). The proportion is relatively uniform across the size of enterprises and the kind of business. The rate of capacity utilization ranges from 30-40% (for small-sized enterprises) to 50-60% (for large-sized enterprises). It also tends to vary depending on the sector in which the business operates, with the average of respondents indicating rates of capacity utilization of around 30-40% for goods, and 40-50% for services. Within these broad sectors, there are quite large differences. In general, manufacturing operations, travel/hospitality and transportation services appear to be operating at their lowest capacities;

i. MSMEs are chiefly concerned by the cash flow outlook, while large companies are challenged by the need to adapt their business model to the crisis;
ii. Access to supplies impacts companies differently according to the size of their operations It should be noted that although "difficulties in obtaining supplies of raw materials essential for production was not seen as a top challenge in the survey, it remains important, especially for those companies engaged in manufacturing;
iii. For those surveyed companies that rely on international suppliers for raw materials essential for production, it appears that micro and small companies are not really exploiting the African market to get their supplies. Therefore, there is a clear opportunity with the ongoing establishment of the African Continental Free Area (AfCFTA) to develop critical regional value chains and supply chains so that

businesses, particularly MSMEs, can better take advantage of the African market to source their inputs;

iv. As African businesses close and capacity utilization is being reduced with the crisis, employees are directly exposed and suffering;

v. Considering that a "lack of operational cash flow" has been identified by Aum, Lee & Shin, (2020a) as one of the key challenges faced by African businesses, particularly smaller ones, which 42% of respondents indicated having approached financial institutions for credit facilities, loans or other financial support. Commercial banks were generally the main financial institution contacted and this is increasingly true as the size of the company grows. On the other hand, State/public loans tended to be favoured by smaller businesses; crowd-funding also appeared to be considered as a non-negligible source of funding for micro and small companies;

vi. "Working capital" accounted for the largest share of financial support requested by respondents; and its share increases with the size of companies. "Factoring/debt recovery delays" and "asset financing" also accounted for significant shares of the requested financial support by MSMEs but were rather insignificant in the case of large companies;

vii. The responses by financial institutions contacted by the surveyed African businesses for financial support turned out to be extremely uneven. The majority of companies had not received any positive response to their requests for financial support by financial institutions, apart from the commercial banks. Only 41%, 17% and 25% of the companies that approached commercial banks, State/public sector banks and other institutions (excluding crowd-funding and microcredit agencies) respectively, have obtained positive responses. The microcredit agencies delayed all loan approvals, while in 50% of the cases, companies that contacted crowd-funding were offered high interest rates;

viii. African businesses have largely been disappointed by the responses to the crisis from their governments so far, and the majority wish to see governments postponing tax payments and providing capital to firms;

ix. African businesses anticipate a slow recovery from the impact of the crisis and their revenues to fall by an average 30-40%, with smaller companies expecting to be impacted even more negatively;

x. Businesses are reacting pro-actively on the whole by adjusting to new technologies and changing internal working processes;

xi. Four fifths of companies expect a direct impact on their turnover, with the smallest firms hit the hardest. Concerns surrounding cash flow rank highest in the minds of small business owners, while larger businesses are more concerned by reduced opportunities to meet customers and the need for diversification of product and service offerings;

xii. Workers are directly impacted by the crisis, particularly in smaller-sized companies, and often forced to work remotely when not laid-off;

xiii. Trade has been impacted and businesses relying on overseas suppliers, express challenges in accessing supplies. Greater difficulties are faced by manufacturing than service industries, whose production is more fragmented and more affected by physical barriers arising from the pandemic;

xiv. While African supplies seem more readily available, they appear underutilized, pointing to opportunities for boosting intra-regional trade.

2.6 Conceptual framework of the study

The research was guided by the following conceptual framework.

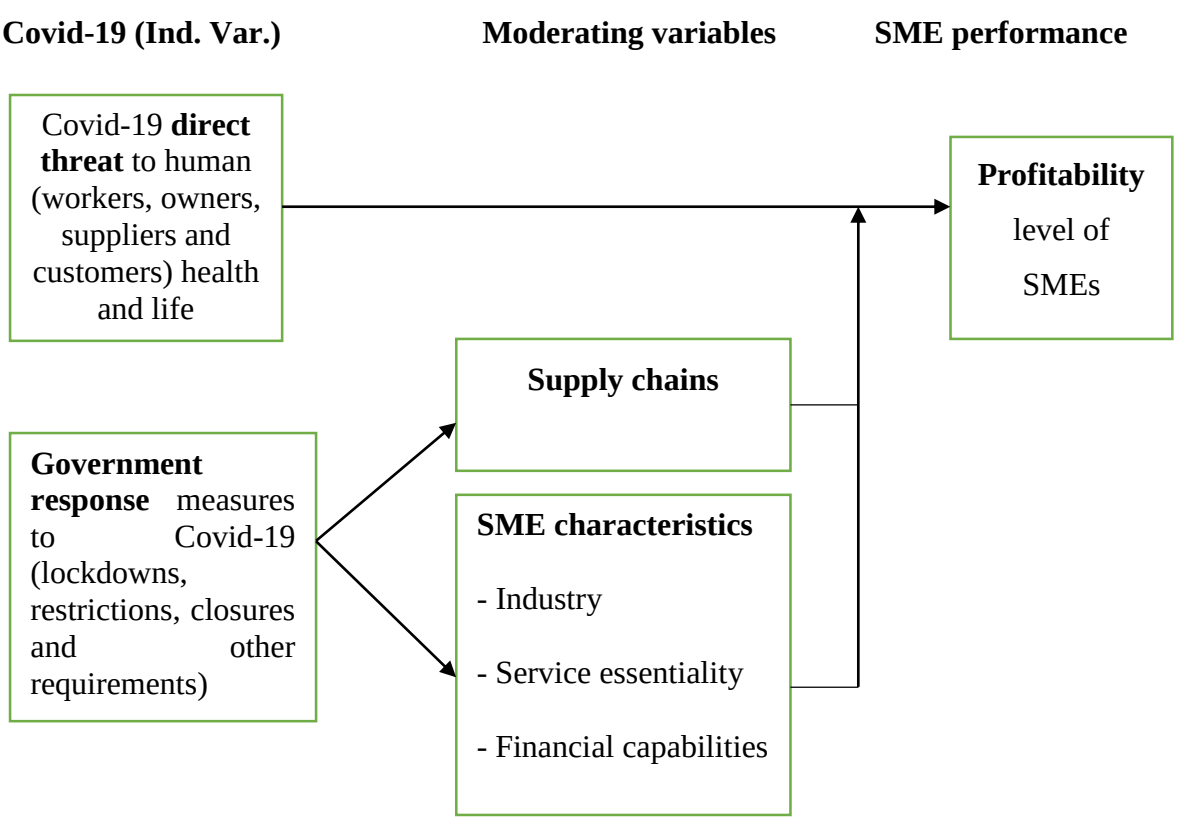

Figure 2. 1: Conceptual framework

Source: Own construct (2021)

The above conceptual framework tries to link the objectives and the variables of the study, the Covid-19's direct threat to human health and life, which ultimately may affect their wellbeing and ability to discharge their duties, which can be measured by the level of production of the SMEs, the level of production of which can be represented by the profit levels of the SMEs. Covid-19 effects also include the response strategies implemented by the government, such as lockdowns and restrictions of movement of goods and people, which may affect supply and demand of SME materials and products, and may result in alterations of opening hours, which may be reduced to zero (total closure). With some factors like location, essentiality of the services of specified SMEs and their financial capabilities, covid-19 and its related response strategies have varied impacts on specified SMEs. Of particular interest the independent variables of the study is profitability (as measured by profitability ratios).

2.7 Research proposition

The research proposes that COVID-19 and government response measures have had a negative impact on SME performance for the majority of SMEs.

As reviewed in literature, the Covid-19 has varied impacts on the performance of businesses. For example, SME performance depends on the nature of government response strategies and the other SME characteristics (e.g. industry). In some industries like the clothing industry and health and science industries, some SMEs have experienced improvements in profitability as a result of producing covid-19 related products like masks (homemade, surgical and other) and sanitizers. This is also the case with flexible MSMEs which can easily switch areas of specialisations. However some SMEs in other industries like entertainment and hospitality have experienced reduction in profitability. The researcher proposed that although some SMEs have actually profited from the Covid-19 outbreak, the overall effect on all SMEs is negative as the majority of the SMEs are located in restricted areas and produce products that are regarded non-essential by the government.

2.8 Research gap

From the reviewed literature, it is evident that the majority of the studies on Covid-19 have been done outside Africa, and only one has been done in Zimbabwe. However, the one that has been done in Zimbabwe by Chirume and Kaseke (2020) focused more on the impact of the lockdown on all businesses in Zimbabwe, and was not focused on SMEs. Given that we are still in the era of Covid-19, and that governments are continuously coming up with varied response strategies, the strategies employed earlier or elsewhere may not necessarily hold water in the present. Therefore there is still a gap in literature in terms scantiness of literature in Zimbabwe and that most of the studies were done in 2020 and not even the current year.

2.9 Chapter summary

The chapter focused on the review of related literature. Both theoretical and empirical literature was reviewed. The theory of Evolution and natural selection was deemed more appropriate in this study. The empirical reviews under each objective of the study were done, which then helped develop a conceptual framework for the study. The research gap was also discussed. The next chapter focused on the research methodology.

CHAPTER 3

RESEARCH METHODOLOGY

3.0 Introduction

This chapter was focused on the discussion of the methodology that was employed for data collection and data analysis in this study. The chapter looked at various methodological aspects including the research philosophy, the research approach, the research design, the research strategy, the research population, sampling procedures and sample size estimation, data sources, research instruments, data collection procedures, data validity and reliability, data analysis and presentation and the ethical considerations made in this study. Justifications for the choice of each methodological aspect were given. Lastly, a chapter summary was given.

3.1 Research objectives, questions and propositions

This section focused on the recapitulation of the research objectives, questions and proposition, which were the major basis for the choice of the methodology of the study.

3.1.1 Research objectives

The research sought to address the following research objectives;

i. To determine the potential Economic and Financial Impact of COVID-19 on SMEs in Zimbabwe
ii. To determine the impact of COVID-19 on supply chains of SMEs.
iii. To establish factors which make SMEs highly vulnerable to the impact of COVID-19
iv. To suggest models that can be employed to manage the financial impact of COVID-19 on SMEs in Zimbabwe

3.1.2 Research questions

The major question to be answered by the research was: What is the impact of COVID-19on SMEs in Zimbabwe? The secondary questions were fourfold;

i. What are the potential Economic and Financial Impacts of COVID-19 on SMEs in Zimbabwe?
ii. What is the impact of COVID 19 on SMEs supply chains in Zimbabwe?
iii. What factors make SMEs highly vulnerable to the impact of COVID-19?
iv. What model (s) can be employed to manage the financial impact of COVID-19 on SMEs in Zimbabwe?

3.1.3 Research proposition

The research proposed that COVID-19 and government response measures have had a negative impact on SME performance for the majority of SMEs.

3.2 Research philosophy

Saunders, Lewis and Thorhnhill (2016) regard a research philosophy as the framework that guides the researcher by showing the ideas about reality and the nature of the researchers' knowledge. This research was guided by a pragmatism research philosophy. This philosophy was supported by the nature of the research objectives, whereby some of the objectives sought to establish the relationship between the covid-19 pandemic and performances (financial and demand and supply) of SMEs in Zimbabwe and one of the objectives sought to establish by way of exploring the factors that make SMEs susceptible to the impact of Covid-19. As a result, a mixed methods of data collection and analysis were employed, which necessitated the need to employ a pragmatism philosophy. Data triangulation would also be enhanced through the adoption of the pragmatism philosophy. In line with the arguments by Guba and Lincoln (2015), best researches are poised somewhere between the two continuums of being quantitative and qualitative.

3.3 Research approach

The study adopted an abductive research approach, which was in line with the research philosophy adopted for this study. As a result, both the quantitative and qualitative methods of data collection and analysis were adopted. The study was however more qualitative than quantitative. This was done in order to have a deeper understanding of how covid-19 is impacting on SMEs in Zimbabwe. Mixing with quantitative methods was meant to enhance data triangulation and to enhance the selection of a large sample for the study.

3.4 Research design

According to Kuvaas (2018), research design refers to the systematic plan outlining how the study is carried out, the methods of gathering data by the researcher and the compilation as well as the analysis and drawing of conclusions. This study adopted both qualitative and qualitative methods of data collection and analysis in line with the research philosophy and research approach of the study. The study however employed more of qualitative methods of data collection and analysis as opposed to quantitative methods. This was also justified by the research objective. For example, variables like sales levels and profitability and number of employees or working hours was quantitative data, whilst data relating to factors making SMEs susceptible to the ravages of covid-19 were better understood using qualitative means. For data collection purposes, an interview guide and a questionnaire were adopted for the study. For data analysis, thematic analysis was adopted for primary data whilst the use of means was used for quantitative data.

3.5 Research strategy

Mintzberg and Waters (2018) regard research strategies to include case study, surveys, ethnography and grounded theory. This study adopted a survey strategy. A survey of SMEs in designated areas like the CBD, Masasa i, Graniteside , Ardbennie , Willowvale and Southerton/Workington . A survey was meant to have a wider coverage of industries as the SMEs are in different industries; as literature has it that the pandemic may have different impacts on SMEs in different industries. Therefore, a survey was regarded to be more representative of the population of SMEs.

3.6 Research population

According to Noor (2017), a research population refers to the total number of elements to which the conclusions drawn from the study are ascribed. This study took all SMEs in Harare as the population of the study. However, the population is unknown, as the SMEs can either be registered or unregistered. However, the FinScope Survey (2020) and the Ministry of Micro, Small and Medium Enterprises (2020) agree that there are about two hundred and fifty thousand SMEs (registered and unregistered – less than 50 employees) in Zimbabwe, with an average of 14 employees, and about 40% are in Harare. The actual population of the study is therefore unknown, but the FinScope survey (2020) established that on average, most of these

SMEs have owner-managers and at least one supervisor or accountant, which results in an estimated population of at least 200 000 owners and or managers, accounts and or supervisors of SMEs in Harare. Table 3.1 presents the population of the study.

Table 3. 1: Research population

Population	**Population size**
SME owners/managers/accountants/supervisors	**200 000**

Source: ***Ministry of MSMEs (2020), FinScope (2020)***

Table 3.1 alludes that the population of the study was about 200 000.

3.7 Sampling procedures

According to Schein (2017), sampling procedures can either be probabilistic or non-probabilistic. Probabilistic sampling techniques are random and they give the population elements equal chances of being selected into the sample. Non-probabilistic sampling techniques give the population elements different chances of being selected into the sample.

Quota sampling, cluster sampling and simple random sampling were employed. The study first of all adopted cluster sampling, which is a probabilistic sampling technique (Smith, 2018). The population was clustered into the SMEs industrial areas around Harare, and random sampling techniques were used to choose four clusters. The four clusters chosen were Willowvale industrial area, Masasa industrial area, the CBD and Ardbennie industrial area. Actual SMEs at each industrial area were chosen using random sampling, until the total number of SMEs corresponding to the assigned quota per each industrial area were chosen. For each SME chosen, either the owner, manager, supervisor or accountant would be selected into the sample. Quota sampling was adopted in order to make sure that each chosen industrial area would definitely contribute to the sample so that the data would definitely be collected from different industrial areas. Random sampling techniques were employed in order to eliminate bias as all the population elements would have equal chances of being part of the sample.

3.8 Sample size

According to Silverman (2017), whenever a sample is taken, there is a sampling error. However, statistical formulae can be used to determine the appropriate sample size given a

certain size of population. Silverman (2017) recommends the use of the Krejcie and Morgan (1970) method of calculation of the sample size of the population in a bid to improve sample representativeness. The formula by Krejcie and Morgan (1970) is illustrated and applied as f is given as;

$$\mathbf{s = \frac{X^2 NP(1-P)}{d^2(N-1) + X^2 P(1-P)}}$$

s = required sample size.

X^2 = the table value of chi-square for 1 degree of freedom at the desired confidence level (= 1.96^2 = 3.8416 for this study).

N = the population size (200 000 for employee category this study).

P = the population proportion (0.50 since this would provide the maximum sample size for this study).

d = the degree of accuracy expressed as a proportion (0.05 for this study)

The following is the formula for the sample size of the employee population.

$$\mathbf{s = \frac{1.96^2 \times 200000 \times 0.5(1-0.5)}{0.05^2(200000-1) + 1.96^2 \times 0.5(1-0.5)}}$$

s = 383

Therefore the sample size for this study was 383. Table 3.2 shows the breakdown of the sample size for this study, which sample was broken down according to the industrial areas. The instrument used on each population category is superimposed.

Table 3. 2: Sample size

Population category	Sample	Questionnaire	Interview guide
CBD	**96**	90	6
Willowvale	**96**	90	6
Ardbennie	**96**	90	6
Masasa	**95**	90	5
TOTAL	**383**	**360**	**23**

Table 3.2 above shows that the total sample size for this study was 383, of which a questionnaire would be used on 360 respondents and the interview guide would be used on the 23 remaining sample elements.

3.9 Data sources

There are two sources of data (Robson, 2018). These are primary data and secondary data. This study used mainly the primary data for this study. According to Schein (2017), primary data is data that is collected for the first time from the field, with an intention of solving the current research. This study collected primary data which was analysed into findings that were the basis of the conclusions on the research objectives. The research objectives of the study sought to establish the extent of the impact of the covid-19 pandemic on the performance of SMEs, and because the research design adopted was mainly qualitative, the researcher considered primary data to be more appropriate in understanding how exactly does the covid-19 pandemic affect these SMEs. This was mainly because the impact of the pandemic can both be quantifiable or unquantifiable, of which primary data was considered to be able to collect data relating to both qualitative and quantitative extents of the impact. For example, where sales declined, the respondents could actually indicate or state the figures, and where there was a disruption of supply chain, the extent of such disruption could also be expressed by the respondents as primary data.

3.10 Research instruments

According to Denscombe (2017), a research instrument is a tool that is used by the researcher to collect research data. This research employed both the questionnaire and the interview guide as the research instruments. The purpose of using the two instruments was to enhance data triangulation and to be able to complete the survey within reasonable time period within reasonable budgets.

3.10.1 Questionnaire

The study used a questionnaire for the survey. A total of 360 respondents were targeted with the questionnaires. The questionnaire contained questions relating to the impact of the covid-19 on the financial performance of the SMEs, the impact of covid-19 on the supply-demand sides of the SMEs and what the SME stakeholders think are the reasons for the current level of

impact of covid-19 on their businesses. To do that, the questionnaire constituted of only the closed ended questions, whereby a Likert scale was used to craft the questions relating to the research objectives. The Likert scale typically had questions with possible answers, such as those ranging from Strongly Disagree (with a weight of 1), Disagree (with a weight of 2), Neutral (with a code of 3), Agree (with a code of 4) to Strongly Agree (with a code of 5). This data was categorical and ordinal.

The questionnaire was designed as follows. It had basically three parts. The first part of the questionnaire was administrative, which contained an introduction by the researcher to the respondents, information on the purpose and importance of the researcher, the instructions, the questionnaire number, date and the researcher's contact details. The second part of the questionnaire constituted the background and demographic information of the respondents. This information was considered important to the study as it showed the suitability of the participants in participating in the study. The third section constituted the questions relating to each of the study objectives, which were mainly Likert-scale type closed questions. The reviewed literature under each of the research objective formed the basis upon which the questions were crafted. Lastly, the researcher thanked the respondents for having completed the questionnaire.

3.10.2 Interview guide

An interview is a conversation between a presenter (interviewer) and the respondent (interviewee), either face to face or over a telephone (Thomas and James, 2015). The study also used the interview guide as a primary and qualitative data collection instrument on 23 sample elements. Questions regarding the extent of the impact of covid-19 pandemic on the performance of the SMEs and the factors that the respondents consider to be applicable in determining the extent to which covid-19 impacts on these SMEs were asked. The interview guide was structured, but the researcher would probe whenever respondents would have introduced some topical aspects. Non-verbal cues would also be noted during face to face interviews and those carried out over visual electronic communication channels such as Zoom. Above all, the interview guide was employed to enhance data triangulation.

3.11 Data collection procedures

The researcher was guided by the literature reviewed and the research objectives to construct the research instruments and their contents. After that the researcher obtained a letter of approval from the university, which letter would serve to solicit for audience from the SMEs. After that the researcher then approached the sampled SMEs with the letter of approval and sought for permission to carry out the research. With their permission, the researcher then proceeded to distribute the research instruments (questionnaires in particular), and in terms of interviews, the researcher would schedule the interviews as guided by the respondents' timetables. Questionnaires were either hand-delivered to the respondents, and where the respondents would prefer that the questionnaire be emailed, the questionnaire would be emailed, the respondent would either print and complete then scan it and resend the completed questionnaire, or after completion of the questionnaire the respondents could ask the researcher to come ad collect the completed questionnaire. Also, where questionnaires were emailed, some respondents would complete the questionnaires on computer, then send the word document back. Although it would take an average of 15 minutes to complete the questionnaire, the respondents were given up to a maximum of two days to complete the questionnaires in order to allow then have a free slot to complete the questionnaire, either at work or at home. This was also the case as the researcher sought to reduce the chance that the respondents would fail to return the questionnaires, due to some reasons like misplacement. As for the interviews, the researcher scheduled meetings in such a way that the meetings were mutually exclusive, hence some negotiations were made with the respondents to make sure the scheduled interview periods would not conflict. It took the researcher about two weeks to complete the data collection process. After collection of data, the researcher then checked for completeness of the instruments, then proceeded to calculate the response rate and data validity. This data collection procedure was adopted from the procedure used by Langkos (2014).

3.12 Data validity and reliability

According to Langkos (2014), validity is the degree to which the research instrument measures what the researcher intends to measure. He also regards reliability as the internal consistence of the instrument. Johnston (2018) also specifies that reliability measures the extent to which the same instrument can be reused with the same population elements using a different sample such that similar conclusions can be drawn. For validity, the instrument was pretested with some of the population elements to determine if their responses were in line with what the

researcher would have asked, using a pilot study. Also, the instruments were scrutinised by the research project supervisor. For the enhancement of reliability, the Cronbach's Alpha was used to test the reliability of the questionnaire instrument during pilot studies and after final data collection. A Cronbach's Alpha of at least 0.70 would show high reliability whilst an Alpha at least 0.5 would show that the instrument was reliable and an Alpha below 0.5 would show that the instrument was unreliable, as specified by Johnston (2018).

3.13 Data analysis and presentation

3.13.1 Quantitative Data Analysis and presentation

In order to obtain a meaningful report Mugenda (1999) states that data must be cleaned, coded and properly analysed. Statistical procedures are widely used for analysing quantitative data (Mugenda and Mugenda, 2014). The researcher made the data ready for analysis through checking of the completed questionnaires in order to detect errors, omissions and rejects.

The researcher had to first of all make the data ready for analysis through scanning through the completed questionnaires in order to detect errors and omissions. Editing is a process of manually checking and perusing through the questionnaires to see if they were completed per expectation and to detect any errors and omissions (Kothari, 2014). It is also done to check for physical completeness and other aspects to help the researcher decide whether it can be used for analysis or not. Errors and omissions would distort the process of importing data into SPSS. Editing was followed by the coding the questionnaires and preparing an Excel input file which was then imported into SPSS. The researcher used the Statistical Package for Social Sciences (SPSS Version 16.0) to analyse quantitative data. Statistical measure of mean was used for data analysis. Percentages were also used. The researcher used tables and graphs to present data. Tables and graphs were presented using Microsoft Offices Packages of Excel and Word.

3.13.2 Qualitative Data Analysis and presentation

Data collected from open questions and interviews was analysed qualitatively. Some of the responses were infused to the research findings from questionnaires to support the findings. The data was summarised in writing, and the major thrusts pointed or themes discussed by the respondents. Texts and quotations were used for presentation of qualitative data.

3.14 Limitations

The study took a sample. As a result, there was sampling error. To minimise the error, a statistically authentic formula by Krejcie and Morgan (1970) formula which minimises the sampling error was adopted for the study. Further probabilistic sampling methods were used to allow randomisation of data, which reduces error (Crawshaw and Chambers, 2001).

The study used mainly the questionnaire for data collection, which is more of a quantitative tool. To allow for data triangulation, some interviews were also conducted.

The independent variable for the study was profitability, which is mainly a quantitative variable. This was done because the researcher believes that the majority if not all SMEs have at least a profit motive, hence using profitability for measurement of performance can be more universally applicable than any other performance measure. However, some of the SMEs may not necessarily have profit motives.

The study took a sample only from Harare, and within Harare, only four places were considered for sampling purposes. The study could be more representative had it included SMEs in other parts of the country, or at least more industrial areas than the four. However, to improve representation of the results, the study included SMEs across all industries, registered or unregistered.

3.15 Ethical considerations

Various ethical issues were considered by the researcher whilst collecting the data. With reference to Zikmund (2000), when dealing with research ethics it was necessary to keep in mind that, the principles of ethical propriety resolve into simple considerations of fairness, honesty, openness of intent, disclosure of methods. Furthermore, the need of the researcher to guarantee unequivocally individual privacy, and an informed willingness on the part of the subject to participate voluntarily in the research are extremely important to protect the respondents as well as the researcher (Saunders, et al., 2012). This also enforced validity of the research. Churchill (1995) defines ethics as moral principles and values that govern the way an individual or group conducts their activities. The following ethical principles were adhered to in this study:

The researcher assured participants that the purpose of the research was strictly academic and that those who are willing to participate should do so voluntarily and they are free to withdraw at any point of the research, should they feel like it. Participants were also given a chance to ask questions for further clarification of the costs and benefits of taking part in the research to make sure they understood.

Clearance letters were obtained in advance which assisted researcher with access into organisations and institutions. Researcher sought authority from the sampled SMEs.

Privacy and confidentiality were enforced to protect personal and sensitive data through avoidance of information such as respondents' names and contact detail on the interview and questionnaire documents.

Voluntary participation was adopted in the research. Participation in the research was voluntary and the researcher did not physically or psychologically force the participants in the sample to take part.

3.16 Chapter Summary

In this chapter, the researcher discussed the research methodology. Discussed in the chapter were the research philosophy, of which a pragmatism philosophy was adopted. The study adopted an abductive research approach and a mixed method research design, which was more qualitative than quantitative. The population of the study constituted 200 000 SMEs owners and workers with high level of authority within those SMEs. Cluster sampling, quota sampling and random sampling techniques were adopted in this study. Krejcie and Morgan formula was used to come up with a sample size of 383. Primary data were collected for the purposes of analysis in this study. Questionnaires and interview guide were used in this study to collect primary data. Data validity and reliability were enhanced and/or measured in this study. SPSS package was used to analyse quantitative data. Research ethics of voluntary participation, freedom of withdrawal, non-payment for participation and anonymity of respondents were observed in this study. In the next chapter the researcher analysed the collected data, presented the analysed data, interpreted the presented results into findings, and then discussed the findings of the research.

CHAPTER 4

DATA ANALYSIS, PRESENTATION AND DISCUSSION

4.0 Introduction

The chapter considered the analysis of the collected data, the presentation of the analysed data, then the interpretation of the presented data, and the discussion of the results from interpretation of the presented data. The first focused on the response rate, then focused on the reliability of the questionnaire instrument, before proceeding to analyse, present and interpret results on the demographics and background of the respondents or participants. After that the actual results pertaining to the research objectives were analysed, presented, interpreted and discussed. Discussions were done with particular reference to the reviewed literature to determine the concurrences and conflicts of the results of this study and the results and claims of others as reviewed in literature.

4.1 Response rate

The study adopted the response rate formula proposed by Saunders, Lewis and Thornhill (2016) who express response rate as the percentage of successful instruments to the total number of instruments distributed. Table 4.1 presents results in response rate.

Table 4. 1: Response rate

Instrument	Distributed/Planned	Successful	Response rate
Questionnaire	360	301	83.61%
Interview guide	23	17	73.91%
ALL	**383**	**318**	**83.03%**

The results in Table 4.1 show that the response rate on the questionnaire used was 83.61%, and that on the interview guide was 73.91%. Overall, the response rate for this study was 83.03%. In line with the claims by Shirley and Sushanta (2014), a response rate that is in excess of 70% is high enough to be representative of the sample used. As a result, the response on both the questionnaire and the interview guide, and the overall response rate were high enough to enhance representativeness of the results on the population of SMEs, as these rates were all above 70%.

4.2 Reliability statistics

Table 4.2 presents results on the reliability of the questionnaire. According to Johnston (2019), a Cronbach's Alpha of at least 0.7 implies that the instrument was highly reliable, and the response rate at least 0.50 shows reliability. SPSS was used to test the reliability of the questionnaire.

Table 4. 2: Reliability statistics

Cronbach's Alpha	N of Items
.932	19

Source: Primary data (2021)

The results in Table 4.2 show that the Cronbach's Alpha was 0.932, with 19 items. According to Johnston (2019), this implies that the questionnaire used was highly reliable for the study, the questionnaire was internally consistent. This implies that the questionnaire could be reused on another sample drawn from the same SME population with similar conclusions being drawn.

4.3 Demographics and background information of respondents

This background information served to determine the suitability of the participants in the study.

4.3.1 Level of education

Figure 4.1 presents results on the level of education of the participants.

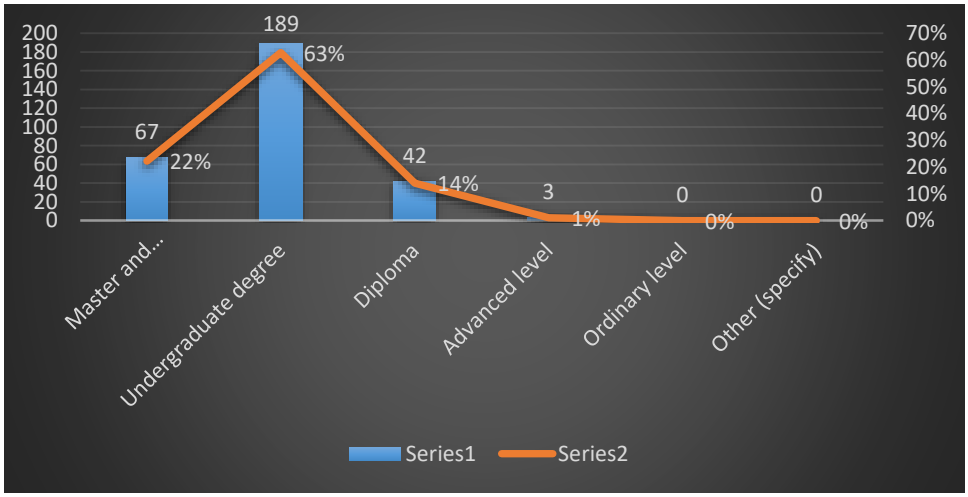

Figure 4. 1: Level of respondents

Source: Primary data (2021)

The results in Figure 4.1 show that the modal level of education was the undergraduate degree, with 63% of the respondents. This was followed by the master and doctorate degree with 22% of the respondents, followed by those holding diplomas, constituting 14% of the respondents. The least category was the 'advanced level holders constituting 1% of the respondents. The results show that all the respondents had formal education and 99% of the respondents. According to Robson (2018), the more educated the respondents the better they are in understanding the questions on the instrument, and the higher the probability of getting more valid opinions from the participants basing both on experience and literature. As a result, in terms of education level, the participants were highly suitable for this study.

4.3.2 Level of experience with SMEs

Figure 4.2 presents results on level of experience of participants with the SMEs.

Figure 4. 2: Level of experience of participants with SMEs

Source: Primary data (2021)

The results in Figure 4.2 show that the modal level of experience is the 11-15 years with 37% of the respondents, followed by the 16-20 years group with 28% of the respondents. The least category is the 'less than 5 years' with 7% of the respondents. From the results, 93% of the respondents have more than five years level of experience with SMEs, which, according to

Robson (2018), is long enough for respondents to have experienced much at the concerned organisation or in the industry. As a result, the general level of experience of the participants was regarded as highly suitable for the study as they are highly experienced, such that their responses would be based more on experience rather than theories and expectations.

4.3.3 Level of authority within SMEs

The results on the levels of authority of the participants (within their respective SME organisations) are presented in Figure 4.3.

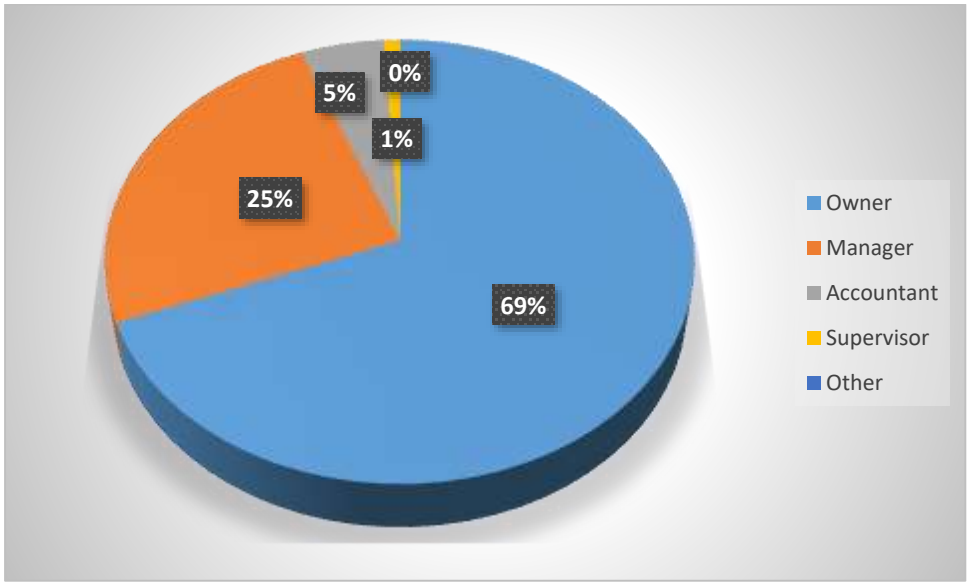

Figure 4. 3: Level of authority of the participants

Source: Primary data (2021)

The results in Figure 4.3 show that the majority of the participants were owners of the SMEs (69%), of which ownership is the highest authority for the SMEs, responsible for decision making and overseeing finances and human resourcing (Zisengwe, 2014) . As a result the participants were regarded as highly suitable for the study. The remaining participants constituted 25% as managers, 5% as accountants and 1% as supervisors. The results show that the authorities of the respondents were skewed towards ownership, which was quite suitable for the study given the issue under research.

4.3.4 Industry

The results on the industries in which the participants' SME organisations are operating are presented in Figure 4.4.

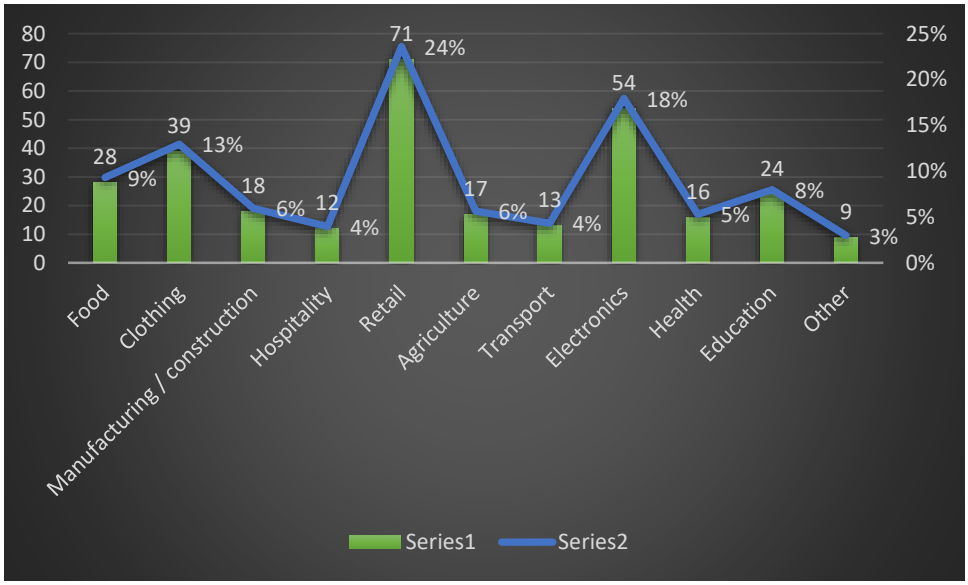

Figure 4. 4: SME industries

Source: Primary data (2021)

The results in Table 4.4 show that the majority (24%) of the SMEs were in the retail sector, followed by the electronics with 18% of the respondents. The least category was the hospitality sector with 4% of the participants. Other industries highlighted by the respondents were entertainment, filming and communication industries. The results show that there was almost a balanced mixture of industries in the sample, which was considered good for the study as the effect of covid-19 may vary according to industry.

4.5 Economic and financial impact of Covid-19 on SMEs – objective one

The first objective of the study sought to determine the financial and economic impact of covid-19 on SMEs in Zimbabwe. Relevant questions were asked in both the questionnaire and the interview guide. Table 4.3 presents results from the questionnaire. The analysis method was obtained from Green (2014) who used a Likert scale from 1-5, and used the mean of the responses to determine the extent to with the respondents have either disagreed or agreed with the notion/assertion/question.

A mean closer to 1 shows strong disagreement (SD), that close to 2 shows disagreement (D), a mean close to 3 shows neutrality (N), a mean close to 4 shows agreement (A) and a mean close to 5 shows strong agreement (SA). The standard deviation below 1 shows high consistency of responses and high reliability of the mean, and standard deviation at most 1.50 shows moderate reliability, whilst that above 1.50 shows low reliability of the mean.

Table 4. 3: Economic and financial impact of Covid-19 on SMEs

	SD	D	N	A	SA	Mean	s.d.
Statement	1	2	3	4	5		
Covid-19 has resulted in a significant reduction in our sales volumes	31 (10%)	40 (13%)	58 (19%)	76 (25%)	96 (32%)	3.55	1.33
Covid-19 has resulted in a significant reduction in our profit figures	32 (11%)	32 (11%)	57 (19%)	57 (19%)	123 (41%)	3.69	1.37
Covid-19 has resulted in a significant increase in the cost of doing business for us	27 (9%)	31 (10%)	51 (17%)	61 (20%)	131 (44%)	3.79	1.34
Covid-19 has resulted in a significant shortage of working capital for us (e.g. to finance inventories)	26 (9%)	47 (16%)	54 (18%)	64 (21%)	110 (37%)	3.61	1.34
Covid-19 has resulted in us failing to at least maintain wages and salaries for all our workers	39 (13%)	45 (15%)	72 (24%)	48 (16%)	97 (32%)	3.40	1.40
Covid-19 has resulted in us having reduced access to liquidity and financial credit	26 (9%)	48 (16%)	50 (17%)	69 (23%)	108 (36%)	3.61	1.34
Covid-19 has resulted in us failing to meet fixed and statutory costs, e.g. rent and debt interests and principal repayments obligations	10 (3%)	29 (10%)	59 (20%)	140 (47%)	63 (21%)	3.72	1.01

Source: Primary data (2021)

The results in Table 4.3 indicate that a mean of 3.55 was obtained on the notion that 'Covid-19 has resulted in a significant reduction in our sales volumes'. This implies that the respondents were generally in agreement with the notion. The standard deviation of 1.33 showed moderate reliability of the mean. The study established here that Covid-19 has generally resulted in significant reduction of sales volumes among SMEs in Zimbabwe. This is in tandem with the claims by Chirume and Kaseke (2020) who claimed that Covid-19 has resulted in reduction in sales volumes for businesses.

Furthermore, the results in Table 4.3 allude that a mean response on the idea that "Covid-19 has resulted in a significant reduction in our profit figures" was 3.69, with a standard deviation

of 1.37. The results indicate that the respondents were generally in agreement with the idea, and the generalised position is moderately reliable. As a result, the results indicate that Covid-19 has generally resulted in a significant reduction in profit figures for SMEs in Zimbabwe. The result concurs with the findings of Craven (2020) who found in his study that covid-19 has resulted in decline in profit margins for businesses.

In addition, the results in Table 4.3 indicate that a mean of 3.79 was obtained on the assertion that 'Covid-19 has resulted in a significant increase in the cost of doing business for us', with a standard deviation of 1.34. This implies that the respondents were generally in agreement with the assertion, and the position is moderately reliable. The study found here that overall, Covid-19 has resulted in a significant increase in the cost of doing business for SMEs in Zimbabwe. This confirms the results of Yasenov (2020) in Mexico who established increased cost of doing business for Mexican SMEs due to Covid-19.

Furthermore, the results show in Table 4.3 that a mean response of 3.61 was obtained on the notion that 'Covid-19 has resulted in a significant shortage of working capital for us (e.g. to finance inventories)', with standard deviation of 1.34. This shows that the respondents generally agreed with the conception, and the position is moderately reliable in representing the general position for SMEs in that regard. As a result, it was established here that overall, Covid-19 has resulted in a significant shortage of working capital for SMEs in Zimbabwe. This conforms the results of Lu, Wu, Peng & Lu, (2020) who established that SME businesses in China have suffered shortage of working capital due to covid-19.

Apart from that, the results in Table 4.3 indicate that a mean of 3.40 was obtained on the notion that 'Covid-19 has resulted in us failing to at least maintain wages and salaries for all our workers' with a standard deviation of 1.40. This shows that the respondents were generally neutral with regards to the conception, and this generalised position is moderately reliable. The study established here that in general, it is not certain if Covid-19 has resulted in SMEs in Zimbabwe failing to at least maintain wages and salaries for all their workers, which conflicts with the results of Lu, Wu, Peng & Lu, (2020) whose study found a glaring impact of Covid-19 on the ability of SMEs to maintain wages in China.

Moreover, the results allude that a mean of 3.61 was obtained on the idea that 'Covid-19 has resulted in us having reduced access to liquidity and financial credit' with a standard deviation of 1.34.

This implies that the participants were generally in agreement with the assertion, and this position is moderately reliable. The study obtained here that Covid-19 has resulted in the majority of SMEs having reduced access to liquidity and financial credit in Zimbabwe, which confirms the findings of Simonov et al. (2020) in the Philippines.

Further, the results in Table 4.3 show that a mean response of 3.72 was obtained on the notion that 'Covid-19 has resulted in us failing to meet fixed and statutory costs, e.g. rent and debt interests and principal repayments obligations', with a standard deviation of 1.01. The results indicate that the respondents were generally in agreement with the notion. The study established here that Covid-19 has resulted in the majority of SMEs in Zimbabwe failing to meet fixed and statutory costs, e.g. rent and debt interests and principal repayments obligations, in tandem with the results obtained by Lu, Wu, Peng & Lu, (2020).

The results from a related question on the interview guide almost confirmed the position obtained from the questionnaire respondents. *What has been the Economic and Financial Impact of COVID-19 on your organisation?* Some of the respondents were quoted to be saying;

Quoted Respondent 1

> *'Covid-19 has resulted in so much financial problems for us. Mainly because of the nature of government response to the pandemic, some of us have once been forced to temporarily close shops, which meant that we were not able to generate sales during such periods'*

Quoted Respondent 2

> *'Covid-19 has not only been hazardous to human life, but to business life. During lock downs, some of us did not totally close shops, but due to social distancing rules, we were forced to reduce the workforce to allow social distancing at the work-place, especially because the work-from-home new normal was not possible for some of us. With a reduction in workforce, our production levels reduced drastically. Coupled by poor effective demand during the covid-19 era, our profitability as a business dropped significantly'.*

Quoted Respondent 3

'Some of us in the clothing industry have been better off during the lockdown as we have been able to reduce the production of the usual products and focused on covid-19 related products especially masks. Although we suffered competition in the production of these masks, we have been able to at least maintain our revenue levels, and sometimes to realise higher earnings during the covid-19 era'

The results obtained from the interview guide generally pointed to a reduction in profitability and revenues for most SMEs although some SMEs argued that they have been able to switch to the production and supply of covid-19 related products which at least maintained their revenue income level. From the interview guide, the majority of the SMEs suffered negative economic and financial impact as a result of Covid-19. This finding tallies with the empirical findings of researchers like Lu, Wu, Peng & Lu, (2020) in China, Yasenov (2020) in Mexico, Worldometer (2020) in South Africa, Roser, Ritchie, Ortiz-Ospina & Hasell (2020) in the UK, Dai et al. (2020) in China and Simonov et al. (2020) in the Philippines.

4.6 Impact of covid-19 on supply chain of SMEs

The second objective of the study sought to determine the impact of covid-19 on the supply chain of SMEs. The results from questionnaires are presented in Table 4.4.

Table 4. 4: Impact of Covid-19 on the supply chain of SMEs

	SD	D	N	A	SA	Mean	s.d.
Statement	1	2	3	4	5		
Covid-19 has resulted in a significant reduction in the demand of our 'non-essential' products	24 (8%)	32 (11%)	100 (33%)	58 (19%)	87 (29%)	3.50	1.23
Covid-19 has resulted in a significant increase in the demand of our 'essential' products	0 (0%)	21 (7%)	41 (14%)	108 (36%)	131 (44%)	4.16	0.91
Covid-19 has resulted in significant disruptions in the supply of our materials and products	2 (1%)	27 (9%)	54 (18%)	71 (24%)	147 (49%)	4.11	1.04

Covid-19 has resulted in significant disruptions in the supply of imported materials	0 (0%)	0 (0%)	19 (6%)	87 (29%)	195 (65%)	4.58	0.61
Covid-19 has resulted in significant disruptions in the supply of locally supplied materials	41 (14%)	49 (16%)	116 (39%)	52 (17%)	43 (14%)	3.02	1.21
Recovering after Covid-19 lockdowns has been slowed down by poor supplies of materials	23 (8%)	37 (12%)	68 (23%)	73 (24%)	100 (33%)	3.63	1.27
Recovering after Covid-19 lockdowns has been slowed down by poor supplies of labour	57 (19%)	117 (39%)	87 (29%)	24 (8%)	16 (5%)	2.42	1.05

Source: Primary data (2021)

The results in Table 4.4 show that a mean response of 3.50 was obtained on the notion that 'Covid-19 has resulted in a significant reduction in the demand of our 'non-essential' products', with a standard deviation of 1.23. The results indicate that the respondents were generally in agreement with the notion. The study established here that Covid-19 has resulted in a significant reduction in the demand of SMEs' non-essential products in Zimbabwe, which confirms the results obtained by Baccini & Brodeur (2020) in the United States, who found the demand for non-essential products declining due to covid-19.

Furthermore, the results in Figure 4.4 indicate that a mean of 4.16 was obtained on the notion that 'Covid-19 has resulted in a significant increase in the demand of our 'essential' products', with a standard deviation of 0.91. This shows that the respondents were in strong agreement with the notion, and the mean is highly reliable. The results indicate that Covid-19 has resulted in a significant increase in the demand of essential products for SMEs in Zimbabwe, confirming the results obtained by Baccini & Brodeur (2020).

The results in Table 4.4 further allude that a mean response with a weight of 4.11 was obtained on the notion that 'Covid-19 has resulted in significant disruptions in the supply of our materials and products', with a standard deviation of 1.04. The mean value shows that the respondents were generally in agreement with the notion. The study established here that Covid-19 has resulted in significant disruptions in the supply of materials and products for the majority of SMEs in Zimbabwe. This is in line with the study by Wedawatta and Ingirige (2012) who found that natural disasters like floods negatively impact on SMEs supply chains,

and the study by Tokui (2017) in Japan which established that natural disasters like earthquake negatively impact on businesses' supply chains.

Furthermore, the results in Table 4.4 show that a mean of 4.58 was obtained on the notion that 'Covid-19 has resulted in significant disruptions in the supply of imported materials', with a standard deviation of 0.61. This shows that the respondents generally in strong agreement with the notion, and the position is highly reliable as the standard deviation is quite low. The study found here that Covid-19 has generally resulted in significant disruptions in the supply of imported materials for SMEs relying somehow on imported products in Zimbabwe.

Moreover, the results in Table 4.4 allude that a mean of 3.02 was obtained on the conception that 'Covid-19 has resulted in significant disruptions in the supply of locally supplied materials', with a standard deviation of 1.21. This shows that the respondents were generally neutral with regards to the conception. The study established here that Covid-19 has not clearly resulted in significant disruptions in the supply of locally supplied materials. This confirms the conclusions by Juergensen, Guimón and Narula (2020) on the European SMEs, which study established that covid-19 has had a negative impact on the flow of imports and exports.

Apart from that, the results in Table 4.4 also show that on the idea that "Recovering after Covid-19 lockdowns has been slowed down by poor supplies of materials", a mean response of 3.63 was obtained, with a standard deviation of 1.27. This implies that the respondents were generally in agreement with the idea. The results show that recovering after Covid-19 lockdowns has been slowed down by poor supplies of materials for the majority of SMEs in Zimbabwe. The result confirms the empirical findings of Dahlhamer and Tierney (1998) on the Northridge earthquake that recovery after disasters is a challenge on businesses due to difficulties in getting supplies and materials for running the businesses.

The results further indicate that a mean response of 2.42 was obtained on the notion that 'recovering after Covid-19 lockdowns has been slowed down by poor supplies of labour', with a standard deviation of 1.05. This shows that the respondents were generally in disagreement with the notion raised here. The results indicate that for the majority of SMEs in Zimbabwe, recovering after Covid-19 lockdowns has not been slowed down by poor supplies of labour. This conflicts the generalised claim by Tierney (2007) who claimed that recovering after disasters is usually a challenge for businesses.

The results from the interview guide almost confirmed the findings from the questionnaire. The major themes raised by the interviewees pointed out that Covid-19 has had an effect mainly on imported products and raw materials, and disrupted movement of goods locally due to roadblocks which affects timely delivery of materials and products. Other points raised were the closure and downsizing of some suppliers and customers which has disrupted supply chain activities. These results are in line with the results obtained by Worldometer (2020) in South Africa and that by Gourinchas (2020) who established that Covid-19 has resulted in disruptions of supply chains for businesses.

4.7 Factors making SMEs vulnerable to the effect of Covid-19

The third objective of the study sought to determine the factors that make SMEs vulnerable to the effects of covid-19. The results from the questionnaire are presented in Table 4.5.

Table 4. 5: Factors making SMEs vulnerable to the effects of covid-19

	SD	D	N	A	SA	Mean	s.d.
Statement	1	2	3	4	5		
The non-essentiality of our products and services in the eyes of the government has made us more vulnerable to the effect of Covid-19	2 (1%)	8 (3%)	84 (28%)	97 (32%)	110 (37%)	4.01	0.90
The non-essentiality of our products and services in the eyes of the public has made us more vulnerable to the effect of Covid-19	12 (4%)	29 (10%)	121 (40%)	75 (25%)	64 (21%)	3.50	1.05
Financial incapability makes my SME organisation much vulnerable to the effect of Covid-19	23 (8%)	28 (9%)	71 (24%)	132 (44%)	47 (16%)	3.50	1.10
Where my SME organisation is located has made us more susceptible to the impact of Covid-19	31 (10%)	41 (14%)	55 (18%)	87 (29%)	87 (29%)	3.52	1.31
Being labour intensive as an SME has made us more susceptible to the impact of Covid-19	41 (14%)	43 (14%)	49 (16%)	52 (17%)	116 (39%)	3.53	1.46

Source: Primary data (2021)

The results in Table 4.5 indicate that a mean response of 4.01 was obtained on the notion that "The non-essentiality of our products and services in the eyes of the government has made up more vulnerable to the effect of Covid-19", with a standard deviation of 0.90. The results indicate that the respondents were generally in agreement with the notion. The study established here that the non-essentiality of the products and services in the eyes of the government has made the majority of SMEs more vulnerable to the effect of Covid-19. This is clearly in line with the findings of Andersen, Schröder & Svarer, (2020) in Europe that the governments have been careful to exempt only the essential services during lockdowns.

The results further indicated that a mean response of 3.50 was obtained on the notion that 'The non-essentiality of our products and services in the eyes of the public has made us more vulnerable to the effect of Covid-19', with a standard deviation of 1.05. The results indicate that the respondents were generally in agreement with the conception. The study established here that the non-essentiality of some products and services in the eyes of the public has made the majority of SMEs more vulnerable to the effect of Covid-19. The results concur with Worldometer (2020) which claimed that most informal SMEs especially in poor countries have largely suffered from Covid-19 as they have been forced to definitely or indefinitely close business due to reasons to do with non-essentiality of services.

Furthermore, the results indicate that a mean of 3.50 was obtained on the impression that "Financial incapability makes my SME organisation much vulnerable to the effect of Covid-19", with a standard deviation of 1.10. This implies the respondents were generally in agreement with the notion. The study established here that the financial incapability makes the majority of the SME organisations in Zimbabwe much vulnerable to the effect of Covid-19. This result concurs with the empirical findings of a study by Avdiu & Nayyar (2020) in Thailand which established that financial incapability is a challenge that exposes SMEs more to the effect of Covid-19.

Moreover, the results indicate that a mean response of 3.52 was obtained on the notion that "Where my SME organisation is located has made us more susceptible to the impact of Covid-19", with a standard deviation of 1.31. This implies that the respondents were generally in agreement with the notion raised here. The study established here that the locations of the majority of SME organisations has made them more susceptible to the impact of Covid-19. This confirms the claims by Chirume and Kaseke (2020) that in a bid to avoid crowding and ensure social distancing, lockdowns were put to decongest working places, work places and

social places. The results also confirm the findings of Worldometer (2020) which established that most of the areas where SMEs are concentrated have been closed down by the governments in their bid to reduce the spread of the SARS CoV-2 coronavirus.

The results in Table 4.6 also show that the mean response on the notion that "Being labour intensive as an SME has made us more susceptible to the impact of Covid-19" was 3.53, with a standard deviation of 1.46. The results indicate that the respondents were generally in agreement with the conception. The results indicate that the labour intensiveness among some SMEs has made them more susceptible to the impact of Covid-19. This result concurs with the findings from the interviews that the requirements of social distancing affected the size of workforce for some SMEs.

One of the interview respondents was quoted to be saying;

> *'As SMEs we are generally vulnerable to external shocks due to the fact that business viability and continuity is largely threatened due to the smallness of the quantities of raw materials, work-in-progress and finished products that we are conventionally able to stock. During the pandemics era like this, we are quite vulnerable as we suffer disruptions in terms of raw material supplies and finished products'.*

From the results obtained from the interview respondents, SMEs are vulnerable to the ravages of covid-19 due to reasons like size, labour intensiveness, location and essentiality of services and products specialised on. This is in line with the findings of Avdiu & Nayyar (2020) and Aum, Lee & Shin, (2020) who found that due to the requirements for social distancing, labour intensive business have suffered as they end up reducing the size of their workplaces during lockdowns in compliance with social distancing requirements.

4.8 Confirmation or rejection of the research proposition

The study proposed that COVID-19 and government response measures have had a negative impact on SME performance for the majority of SMEs. According to the results of the research, the proposition was correct. According to the findings, some SMEs have actually benefitted from Covid-19, but the majority have suffered negative consequences as a result of the covid-19.

4.9 Chapter summary

The chapter focused on the analysis, presentation, interpretation and discussion of findings. The response rate of the study was 83.03%, the questionnaire used was highly reliable and the demographics and background information of participants indicated that the participants were quite suited for the study. The study then looked at the analysis, presentation, interpretation and discussion of findings. The next chapter focused on the summary, conclusions and recommendations of the study.

CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

The fifth and last chapter of the study concentrated on the summary, conclusions and recommendations of the study. The chapter started by giving a recap of the objectives of this study, then after that the chapter looked at the summary of the main findings of the study pertaining to each of the study objectives. After that the chapter gave conclusions on the research objectives.

5.1 Research objectives

The main objective was to examine the impact of Covid-19 on SMEs in Zimbabwe. The secondary research objectives were;

v. To determine the potential Economic and Financial Impact of COVID-19 on SMEs in Zimbabwe
vi. To determine the impact of COVID-19 on supply chains of SMEs.
vii. To establish factors which make SMEs highly vulnerable to the impact of COVID-19
viii. To suggest models that can be employed to manage the financial impact of COVID-19 on SMEs in Zimbabwe

5.2 Summary of the research findings

Summarised below are the major findings under each objective.

5.2.1 Economic and financial impact of covid-19 on SMEs in Zimbabwe

The study established that Covid-19 has generally resulted in significant reduction of sales volumes among SMEs in Zimbabwe (mean = 3.55). The results further alluded that Covid-19 has generally resulted in a significant reduction in profit figures for SMEs in Zimbabwe (mean = 3.69). Further, the study found that, overall, Covid-19 has resulted in a significant increase in the cost of doing business for SMEs in Zimbabwe (mean = 3.79). The study also established that, overall, Covid-19 has resulted in a significant shortage of working capital for SMEs in Zimbabwe (mean = 3.61).

Moreover, the study also in general, it is not certain if Covid-19 has resulted in SMEs in Zimbabwe failing to, at least,9 maintain wages and salaries for all their workers (mean = 3.40). Further, it was also obtained that Covid-19 has resulted in the majority of SMEs having reduced access to liquidity and financial credit in Zimbabwe (mean = 3.61). In addition, it was established that Covid-19 has resulted in the majority of SMEs in Zimbabwe failing to meet fixed and statutory costs, e.g. rent and debt interests and principal repayments obligations (mean = 3.72). The results generally pointed to a reduction in profitability and revenues for most SMEs although some SMEs argue that they have been able to switch to the production and supply of covid-19 related products which at least maintained their revenue income level.

5.2.2 Impact of covid-19 on supply chains of SMEs

The study established that Covid-19 has resulted in a significant reduction in the demand of SMEs' non-essential products in Zimbabwe (mean = 3.50). Further, the results indicate that Covid-19 has resulted in a significant increase in the demand of essential products for SMEs in Zimbabwe (mean = 4.16). The study also established that Covid-19 has resulted in significant disruptions in the supply of materials and products for the majority of SMEs in Zimbabwe (mean = 4.11). The study also found that Covid-19 has generally resulted in significant disruptions in the supply of imported materials for SMEs relying somehow on imported products in Zimbabwe (mean = 4.58). It was also established that Covid-19 has not clearly resulted in significant disruptions in the supply of locally supplied materials (mean = 3.02). In addition, it was found that recovering after Covid-19 lockdowns has been slowed down by poor supplies of materials for the majority of SMEs in Zimbabwe (mean = 3.63). The results further alluded that the majority of SMEs in Zimbabwe, recovering after Covid-19 lockdowns has not been slowed down by poor supplies of labour (mean = 2.42). The major themes raised by the interviewees pointed out that Covid-19 has had an effect mainly on imported products and raw materials, and disrupted movement of goods locally due to roadblocks which affects timely delivery of materials and products. Other points raised were the closure and downsizing of some suppliers and customers which has disrupted supply chain activities.

5.2.3 Factors making SMEs vulnerable to the effects of SMEs

The study established that the non-essentiality of the products and services in the eyes of the government has made the majority of SMEs more vulnerable to the effect of Covid-19 (mean

= 4.01). The study also obtained that the non-essentiality of some products and services in the eyes of the public has made the majority of SMEs more vulnerable to the effect of Covid-19 (mean = 3.50). Further, the results also allude that the financial incapability makes the majority of the SME organisations in Zimbabwe much vulnerable to the effect of Covid-19 (mean = 3.50). The study further established that the locations of the majority of SME organisations has made them more susceptible to the impact of Covid-19 (mean = 3.52). Further, the results indicate that the labour intensiveness among some SMEs has made them more susceptible to the impact of Covid-19 (mean = 3.53). From the results obtained from the interview respondents, SMEs are vulnerable to the ravages of covid-19 due to reasons like size, labour intensiveness, location and essentiality of services and products specialised in.

5.3 Conclusions

5.3.1 Economic and financial impact of covid-19 on SMEs in Zimbabwe

The first objective sought to determine the economic and financial impact of Covid-19 on SMEs in Zimbabwe. The study concluded that for the majority of SMEs, Covid-19 has resulted in reduction of sales volumes, reduction of profit figures, increase in cost of doing business, shortage of working capital, difficulties in accessing liquidity and financial credit and has resulted in SMEs facing difficulties in meeting fixed and statutory financial obligations like wages, loan repayments and rent. Nevertheless, some SMEs flexible enough have managed to switch to the production and supply of covid-19 related products like sanitizers and masks, enabling themselves to stay above the troubled waters in terms of profitability. However, the generality of the SMEs across various industries have generally experienced reduction in profitability.

5.3.2 Impact of covid-19 on supply chains of SMEs

The second objective of the study sought to determine the impact of Covid-19 on the supply chain of SMEs in Zimbabwe. The study concluded that for the majority of SMEs in Zimbabwe, Covid-19 has resulted in a significant reduction in the demand of SMEs' non-essential products, significant increase in demand of essential products, significant disruptions in supply of materials and products and significant disruptions in supply of imported materials and products. Further, recovering after lockdowns has generally been slowed down by poor supplies of materials for the majority of the SMEs. Local roadblocks have also resulted in some

delays in supply of materials and products from both suppliers and to the market. Also, the downsizing and closure of some suppliers and customers has significantly resulted in disruptions of supply chains in terms of quantity, variety and reliability of supplied materials and products.

5.3.3 Factors making SMEs vulnerable to the effects of SMEs

The third objective of the study sought to determine the factors that make SMEs much vulnerable to the effects of Covid-19. The study concluded that due their small size, they keep small quantities of stock of materials and products, hence with disruptions in supply chains, they are easily vulnerable to such shocks. Also, the non-essentiality of the majority of the SMEs' products as defined by both the government and the market during the era of emergencies like pandemics and lockdowns make the majority of SMEs highly vulnerable. In addition, financial problems, location (such as congested versus uncongested business areas), and being labour intensive has made the majority of SMEs susceptible to the effects of SMEs.

5.4 Recommendations

In line with the fourth objective of the study, the study made recommendations to the study stakeholders basing primarily on the findings and also on the reviewed literature.

5.4.1 Recommendations to SMEs

- The study recommends that SMEs be flexible enough to be able to switch to the production of the necessities during periods of pandemics like covid-19. They can start producing products like face masks and sanitizers which will have huge demand during the covid-19 pandemic.
- Further, SMEs are recommended to reduce labour intensiveness and invest in capital equipment like machines. Machines can be used to replace some workers so that during the covid-19 era when social distancing is a requirement, few employees can still operate machines and production quantities are not significantly affected.
- In addition, SMEs need to adopt ways of enabling their employees to work from home where necessary and possible. Working from home may require purchase of computers, data and other rated equipment for workers, especially those in the services industries like education. Marketing activities for non-essential products can also be done online

and if a customer is found, just one worker can go to the shop and collect the customer's order which is then delivered elsewhere, such as at the customers' residential place or workplace.

- SMEs in Zimbabwe are also recommended to diversify their product portfolios such that when one product is regarded non-essential, they are still able to make profits from other products. This however foes not necessarily mean that the products are sold in one shop. For example, SMEs can diversify into retail and electronics and agriculture.
- In addition, SMEs are recommended to try and keep larger stocks of supplies, for example by making partnerships with each other and rent some warehouses where they can keep their stocks in large quantities so that during lockdowns, they cannot easily experience shocks.
- SMEs are also recommended to, where possible, rely more on local supplies than importing stocks, during the covid-19 era, so that they do not experience much disruptions in supplies as a result of temporary or indefinite closures of national borders, for example.

5.4.2 Recommendations to the government (Ministry of SMEs)

- The Government is recommended to support SMEs, for example, by organising the logistics on how SMEs can import necessary products during lockdowns.
- Further, the government is recommended to assist SMEs with lines of credit especially after lockdowns so that they can easily restock
- In addition, the Ministry also need to assist SMEs with education on how they can still be relevant during lockdowns, e.g. by being flexible enough to produce covid-19 related products like sanitizers and face masks.
- Government is also recommended to educate the police manning roadblocks to find ways of allowing deliveries of essential products not to be delayed on the roads, where possible.

5.5 Recommendations for further study

The study focused on the impact of covid-19 on SMEs in Zimbabwe. Other researchers can focus on large businesses as well. Further, the study was a mixture of quantitative and qualitative methods of data collection and analysis. Other researchers might want to determine the statistical impact of covid-19 on SMEs performance in Zimbabwe, using regression, correlation and ANOVA to determine the statistical significance of the impact the covuid-19

has on SMEs performance in Zimbabwe. Further, samples can be drawn from other cities apart from Harare, and even in the rural areas as the impact of the pandemic can actually vary with geographical places.

REFERENCES

Abouk, R., & Heydari, B. (2020). The Immediate Effect of COVID-19 Policies on Social Distancing Behavior in the United States. *MedRxiv*, 2020.04.07.20057356. https://doi.org/10.1101/2020.04.07.20057356

Acemoglu, D., Chernozhukov, V., Werning, I., & Whinston, M. D. (2020). *A Multi-Risk SIR Model with Optimally Targeted Lockdown* (Working Paper No. 27102; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w27102

Adams, G. and Schvaneveldt, J. (2018). *Understanding Research Methods.* (2nd edn). New York: Longman.

Adams-Prassl, A., Boneva, T., Golin, M., & Rauh, C. (2020, April 23). *INEQUALITY IN THE IMPACT OF THE CORONAVIRUS SHOCK: EVIDENCE FROM REAL TIME SURVEYS* [Text]. https://www.inet.econ.cam.ac.uk/working-paper-pdfs/wp2018.pdf

Adeleke OM, Daniel AO, Ojeleke OM (2020) Supply chain risk management and performance of quoted food and beverage firms in Nigeria Opaleye. *Ilorin Journal Human Resources Management* 4(1):237–246

Agarwal, A., Alomar, A., Sarker, A., Shah, D., Shen, D., & Yang, C. (2020). Two Burning Questions on COVID-19: Did shutting down the economy help? Can we (partially) reopen the economy without risking the second wave? In *Papers* (2005.00072; Papers). arXiv.org. https://ideas.repec.org/p/arx/papers/2005.00072.html

Akesson, J., Ashworth-Hayes, S., Hahn, R., Metcalfe, R. D., & Rasooly, I. (2020). *Fatalism, Beliefs, and Behaviors During the COVID-19 Pandemic* (Working Paper No. 27245; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w27245

Alé-Chilet, J., Atal, J. P., & Dominguez-Rivera, P. (2020). *Where are the Missing Emergencies? Lockdown and Health Risk During the Pandemic* (SSRN Scholarly Paper ID 3595246). Social Science Research Network. https://doi.org/10.2139/ssrn.3595246

Alfaro, L., Faia, E., Lamersdorf, N., & Saidi, F. (2020). *Social Interactions in Pandemics: Fear, Altruism, and Reciprocity* (Working Paper No. 27134; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w27134

Alipour, J.-V., Falck, O., & Schüller, S. (2020). *Germany's Capacities to Work from Home* (SSRN Scholarly Paper ID 3578262). Social Science Research Network. https://papers.ssrn.com/abstract=3578262

Allcott, H., Boxell, L., Conway, J. C., Gentzkow, M., Thaler, M., & Yang, D. Y. (2020). *Polarization and Public Health: Partisan Differences in Social Distancing during the Coronavirus Pandemic* (Working Paper No. 26946; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w26946

Almond, D., Du, X., & Zhang, S. (2020). *Did COVID-19 Improve Air Quality Near Hubei?* (Working Paper No. 27086; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w27086 47

American Medical Association. (2020, April). *Managing mental health during COVID-19*. American Medical Association. https://www.ama-assn.org/delivering-care/public-health/managing-mental-health-during-covid-19

Andersen, M., Maclean, J. C., Pesko, M. F., & Simon, K. I. (2020). *Effect of a Federal Paid Sick Leave Mandate on Working and Staying at Home: Evidence from Cellular Device Data* (Working Paper No. 27138; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w27138

Andersen, T. M., Schröder, P. J. H., & Svarer, M. (2020). *Designing Reopening Strategies in the Aftermath of COVID-19 Lockdowns: Some Principles with an Application to Denmark* (IZA Policy Paper No. 158). Institute of Labor Economics (IZA). https://econpapers.repec.org/paper/izaizapps/pp158.htm

Andree, B. P. J. (2020). *Incidence of COVID-19 and Connections with Air Pollution Exposure: Evidence from the Netherlands* (No. WPS9221; pp. 1–30). The World Bank. http://documents.worldbank.org/curated/en/462481587756439003/Incidence-of-COVID-19-and-Connections-with-Air-Pollution-Exposure-Evidence-from-the-Netherlands

Argente, D. O., Hsieh, C.-T., & Lee, M. (2020). *The Cost of Privacy: Welfare Effect of the Disclosure of COVID-19 Cases* (Working Paper No. 27220; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w27220

Armbruster, S., & Klotzbücher, V. (2020). *Lost in lockdown? COVID-19, social distancing, and mental health in Germany* (Working Paper No. 2020–04). Diskussionsbeiträge. https://www.econstor.eu/handle/10419/218885 48

Atkeson, A., Kopecky, K., & Zha, T. (2020). *Estimating and Forecasting Disease Scenarios for COVID-19 with an SIR Model* (Working Paper No. 27335; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w27335

Aum, S., Lee, S. Y. (Tim), & Shin, Y. (2020a). *COVID-19 Doesn't Need Lockdowns to Destroy Jobs: The Effect of Local Outbreaks in Korea* (Working Paper No. 27264; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w27264

Aum, S., Lee, S. Y. (Tim), & Shin, Y. (2020b). *Inequality of Fear and Self-Quarantine: Is There a Trade-off between GDP and Public Health?* (Working Paper No. 27100; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w27100

Avdiu, B., & Nayyar, G. (2020). *When Face-to-Face Interactions Become an Occupational Hazard: Jobs in the Time of COVID-19* (No. WPS9240; pp. 1–13). The World Bank. http://documents.worldbank.org/curated/en/173701589222966874/When-Face-to-Face-Interactions-Become-an-Occupational-Hazard-Jobs-in-the-Time-of-COVID-19

Babin, B. J., Carr, J. C., Griffin, M. and Zikmund, W. G. (2018). *Business Research Methods*. Minnesota: Sage Publications.

Baccini, L., & Brodeur, A. (2020). *Explaining Governors' Response to the Covid-19 Pandemic in the United States* (SSRN Scholarly Paper ID 3579229). Social Science Research Network. https://papers.ssrn.com/abstract=3579229

Baker, S. R., Bloom, N., & Davis, S. J. (2016). Measuring Economic Policy Uncertainty*. *The Quarterly Journal of Economics*, *131*(4), 1593–1636. https://doi.org/10.1093/qje/qjw024

Baker, S. R., Bloom, N., Davis, S. J., & Terry, S. J. (2020). *COVID-Induced Economic Uncertainty* (Working Paper No. 26983; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w26983

Baldwin, R. (2020, March 13). Keeping the lights on: Economic medicine for a medical shock. *VoxEU.Org*. https://voxeu.org/article/how-should-we-think-about-containing-covid-19-economic-crisis

Balla-Elliott, D., Cullen, Z. B., Glaeser, E. L., Luca, M., & Stanton, C. T. (2020). *Business Reopening Decisions and Demand Forecasts During the COVID-19 Pandemic* (Working Paper No. 27362; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w27362 49

Bao X, Diabat A, Zheng Z (2020) An ambiguous Manager's disruption decisions with insufficient data in recovery phase. Int J Prod Econ 221:107465. https://doi.org/10.1016/j.ijpe.2019.07.038

Bargain, O., & Aminjonov, U. (2020). *Trust and Compliance to Public Health Policies in Times of Covid-19* (SSRN Scholarly Paper ID 3596671). Social Science Research Network. https://papers.ssrn.com/abstract=3596671

Barro, R. J. (2020). *Non-Pharmaceutical Interventions and Mortality in U.S. Cities during the Great Influenza Pandemic, 1918-1919* (Working Paper No. 27049; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w27049

Barro, R. J., Ursúa, J. F., & Weng, J. (2020). *The Coronavirus and the Great Influenza Pandemic: Lessons from the "Spanish Flu" for the Coronavirus's Potential Effects on Mortality and Economic Activity* (Working Paper No. 26866; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w26866

Bartik, A. W., Bertrand, M., Cullen, Z. B., Glaeser, E. L., Luca, M., & Stanton, C. T. (2020). *How Are Small Businesses Adjusting to COVID-19? Early Evidence from a Survey* (Working Paper No. 26989; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w26989

Bartunek, J., Li, S. and Easterby-Smith, M. (2019), 'Research Methods for Organizational Learning: The Transatlantic Gap, Management Learning', *American Journal of Applied Sciences,* 40 (4), pp. 1602-1604.

Baum, C., & Henry, M. (2020). *Socioeconomic Factors influencing the Spatial Spread of COVID-19 in the United States* (Boston College Working Papers in Economics No. 1009). Boston College Department of Economics. https://econpapers.repec.org/paper/bocbocoec/1009.htm

Baunez, C., Degoulet, M., Luchini, S., Pintus, P., & Teschl, M. (2020). *Sub-National Allocation of COVID-19 Tests: An Efficiency Criterion with an Application to Italian Regions* (SSRN Scholarly Paper ID 3576161). Social Science Research Network. https://doi.org/10.2139/ssrn.3576161

Béland, L.-P., Brodeur, A., & Wright, T. (2020c). *The Short-Term Economic Consequences of Covid-19: Exposure to Disease, Remote Work and Government Response* (SSRN Scholarly Paper ID 3584922). Social Science Research Network. https://papers.ssrn.com/abstract=3584922

Bendoly, E. and Swink, M. (2018) 'Moderating effects of information access on project management behavior, performance and perceptions', *Journal of Operations Management,* Vol. 25, pp. 604–22.

Binder, C. (2020). Coronavirus Fears and Macroeconomic Expectations. *Social Sciences Research Network*, 34.

Bloom D. E., Cadarette D. and Sevilla J.P., 'The Economic Risks and Impacts of Epidemics', International Monetary Fund, F&D Magazine, June 2018.

Blumberg, B., Cooper, D. R. and Schindler, P. S. (2019). *Business Research Methods*. Chicago: McGraw Hill Higher Education.

Bouma, G. and Atkinson, G. (2016) *A Handbook of Social Science Research: A Comprehensive and Practical Guide for Students* (2nd edn). Oxford: Oxford University Press.

Briscese, G., Lacetera, N., Macis, M., & Tonin, M. (2020, March). *Compliance with COVID-19 Social-Distancing Measures in Italy: The Role of Expectations and Duration*. https://www.iza.org/publications/dp/13092/compliance-with-covid-19-social-distancing-measures-in-italy-the-role-of-expectations-and-duration

Bryan, A. (2018). *Research Methods and Organisation Studies*. London: Unwin Hyman.

Bryman, A. (2018). Integrating quantitative and qualitative research: how is it done? *International Journal of Social Research Methodology*, Vol. 10, No. 1, pp. 5–20.

Brynjolfsson, E., Horton, J., & Ozimek, A. (2020). *COVID-19 and Remote Work: An Early Look at US Data*. 16.

Carlsson-Szlezak, Philipp, Reeves, M., & Swartz, P. (2020, March 27). Understanding the Economic Shock of Coronavirus. *Harvard Business Review*. https://hbr.org/2020/03/understanding-the-economic-shock-of-coronavirus

Carlsson-Szlezak, Phillip, Reeves, M., & Swartz, P. (2020, March). *What Coronavirus Could Mean for the Global Economy*. https://hbr.org/2020/03/what-coronavirus-could-mean-for-the-global-economy

CDC. (2020, February 11). *Coronavirus Disease 2019 (COVID-19)*. Centers for Disease Control and Prevention. https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/social-distancing.html

Center for Global Development. The Economic Impact of COVID-19 in Low- and Middle-Income Countries. Available online: https://www.cgdev.org/blog/economic-impact-covid-19-low-and-middle-income-countries (accessed on 11 January 2021)

Céspedes, L. F., Chang, R., & Velasco, A. (2020). *The Macroeconomics of a Pandemic: A Minimalist Model* (Working Paper No. 27228; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w27228

Chaghooshi AJ, Moein H (2014) Reducing the risk of transportation disruption in supply chain: integration of FUZZY-AHP and TOPSIS. Glob J Manag Stud Res 1:1–9

Chang, R., & Velasco, A. (2020). *Economic Policy Incentives to Preserve Lives and Livelihoods* (Working Paper No. 27020; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w27020 52

Chatterji, P., & Li, Y. (2020). *Effects of the COVID-19 Pandemic on Outpatient Providers in the US* (Working Paper No. 27173; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w27173

Chen HY, Das A, Ivanov D (2019) Building resilience and managing post-disruption supply chain recovery: lessons from the information and communication technology industry. Int J Inf Manag 49:330–342. https://doi.org/10.1016/j.ijinfomgt.2019.06.002

Chiou, L., & Tucker, C. (2020). *Social Distancing, Internet Access and Inequality* (Working Paper No. 26982; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w26982

Chiripanyanga, O. (2020). Potential Economic Impacts of the COVID-19 Pandemic on Southern African Economies.

Coghlan, D. and Brannick, T. (2015) *Doing Action Research in Your Own Organisation* (2nd edn). London: Sage.

Cohen, L. and Manion, L. (2016). *Research Methods in Education*. London: Routledge.

Coibion, O., Gorodnichenko, Y., & Weber, M. (2020a). *Labor Markets During the COVID-19 Crisis: A Preliminary View* (Working Paper No. 27017; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w27017

Coibion, O., Gorodnichenko, Y., & Weber, M. (2020b). *The Cost of the Covid-19 Crisis: Lockdowns, Macroeconomic Expectations, and Consumer Spending* (Working Paper No. 27141; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w27141

Collis, J. and Hussey, R. (2019) *Business Research: A Practical Guide for Undergraduate and Postgraduate Students* (2nd Ed.). Basingstoke: Macmillan Business.

Cooper, R. and Schindler, S. P. (2017) *Business Research Methods*, 12th ed., McGraw Hill, New York, United States.

Crawshaw, J. and Chambers, J. (2001). *A Concise Course in Advanced Level Statistics*. 4th Ed. London: Nelson Thornes Ltd.

Creswell, J. W., Vicki, L. and Clark, P. (2014). *Designing and Conducting Mixed Methods Research.* Chicago: SAGE Publications Inc.

Creswell, J.W., (2018). *Educational research: Planning, conducting, and evaluating quantitative*. New Jersey: Upper Saddle River.

Cui, Z., Heal, G., & Kunreuther, H. (2020). *Covid-19, Shelter-In Place Strategies and Tipping* (Working Paper No. 27124; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w27124

Curran, J. and Blackburn, R.A. (2017) *Researching the Small Enterprise*. London: Sage.

Das A, Gottlieb S, Ivanov D (2019) Managing disruptions and the ripple effect in digital supply chains: empirical case studies. In: Ivanov D, Dolgui A, Sokolov B (eds) Handbook of the ripple effects in the supply chain. Springer, New York, pp 261–285

Dave, D. M., Friedson, A. I., Matsuzawa, K., McNichols, D., & Sabia, J. J. (2020a). *Did the Wisconsin Supreme Court Restart a COVID-19 Epidemic? Evidence from a Natural Experiment* (Working Paper No. 27322; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w27322 53

Dave, D. M., Friedson, A. I., Matsuzawa, K., Sabia, J. J., & Safford, S. (2020b). *Were Urban Cowboys Enough to Control COVID-19? Local Shelter-in-Place Orders and Coronavirus Case Growth* (Working Paper No. 27229; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w27229

Deaton BJ, Deaton BJ (2020) Food security and Canada's agricultural system challenged by COVID-19. Can. J. Agric. Econ. Can. d'agroeconomie 68:143–149. https://doi.org/10.1111/cjag.12227

Demirguc-Kunt, A., Lokshin, M. M., & Torre, I. (2020). *The Sooner, the Better: The Early Economic Impact of Non-Pharmaceutical Interventions during the COVID-19 Pandemic* (No. WPS9257; pp. 1–95). The World Bank. http://documents.worldbank.org/curated/en/636851590495700748/The-Sooner-the-Better-The-Early-Economic-Impact-of-Non-Pharmaceutical-Interventions-during-the-COVID-19-Pandemic

Denscombe, M., (2016). *Research Proposals: A Practical Guide*. UK: McGraw-Hill Education.

Dingel, J. I., & Neiman, B. (2020). *How Many Jobs Can be Done at Home?* (Working Paper No. 26948; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w26948

Easterby-Smith, M., Thorpe, R. and Lowe, A. (2017). *Management Research: an Introduction*. London: Sage Publications.

Easterby-Smith, M., Thorpe, R., Jackson, P. and Lowe, A. (2018). *Management Research* (3rd edn). London: Sage Publications.

Eden, C. and Huxham, C. (2016) 'Action research for management research', *British Journal of Management*, Vol. 7, No. 1, pp. 75–86.

Fairlie, R. W., Couch, K., & Xu, H. (2020). *The Impacts of COVID-19 on Minority Unemployment: First Evidence from April 2020 CPS Microdata* (Working Paper No. 27246; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w27246

Fan, V. Y., Jamison, D. T., & Summers, L. H. (2018). Pandemic risk: How large are the expected losses? *Bulletin of the World Health Organization*, *96*(2), 129–134. https://doi.org/10.2471/BLT.17.199588

Feinberg, F.M., Kinnear, T. and Taylor, J.R. (2014). *Modern marketing research: Concepts, methods, and cases*. Chicago: Cengage Learning.

Ferguson, N., Laydon, D., Nedjati Gilani, G., Imai, N., Ainslie, K., Baguelin, M., Bhatia, S., Boonyasiri, A., Cucunuba Perez, Z., Cuomo-Dannenburg, G., Dighe, A., Dorigatti, I., Fu, H., Gaythorpe, K., Green, W., Hamlet, A., Hinsley, W., Okell, L., Van Elsland, S., … Ghani, A. (2020). *Impact of non-pharmaceutical interventions (NPIs) to reduce COVID19 mortality and healthcare demand*. Imperial College London. https://doi.org/10.25561/77482

Fernández-Villaverde, J., & Jones, C. I. (2020). *Estimating and Simulating a SIRD Model of COVID-19 for Many Countries, States, and Cities* (Working Paper No. 27128; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w27128 55

Fetzer, T. R., Witte, M., Hensel, L., Jachimowicz, J., Haushofer, J., Ivchenko, A., Caria, S., Reutskaja, E., Roth, C. P., Fiorin, S., Gómez, M., Kraft-Todd, G., Götz, F. M., & Yoeli, E. (2020). *Global Behaviors and Perceptions at the Onset of the COVID-19 Pandemic* (Working Paper No. 27082; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w27082

Fisher, C., (2015). *Researching and writing a Dissertation: An essential guide for business students*. , England: Pearson Education, Harlow.

Fong, M. W., Gao, H., Wong, J. Y., Xiao, J., Shiu, E. Y. C., Ryu, S., & Cowling, B. J. (2020). *Nonpharmaceutical Measures for Pandemic Influenza in Nonhealthcare Settings—Social Distancing Measures*. *26*(5), 976–984. https://doi.org/10.3201/eid2605.190995

Garrett, T. (2007). Economic Effects of the 1918 Influenza Pandemic Implications for a Modern-day Pandemic. Federal Reserve Bank of St. Louis.

Garrett, T. A. (2007). Economic Effects of the 1918 Influenza Pandemic. *Federal Reserve Bank of St. Louis*, 26.

Gibb, F. (2016). *Consumer group accuses lawyers of shoddy service*. *The Times*, 5 Oct.

Glaser, B. and Strauss, A. (2015). *The Discovery of Grounded Theory*. Chicago, IL: Aldine.

Glover, A., Heathcote, J., Krueger, D., & Rios-Rull, J.-V. (2020). *Health versus Wealth: On the Distributional Effects of Controlling a Pandemic* (SSRN Scholarly Paper ID 3583489). Social Science Research Network. https://doi.org/10.2139/ssrn.3583489

Goulding, C. (2014) *Grounded Theory: A Practical Guide for Management. Business and Market Researchers*. London: Sage.

Gourinchas, P.-O. (2020). Flattening the pandemic and recession curves. *Mitigating the COVID Economic Crisis: Act Fast and Do Whatever*. http://viet-studies.net/kinhte/COVIDEconomicCrisis.pdf#page=38

Gray, D. E. (2017). *Doing Research in the Real World*, University of Surrey: SAGE Publications.

Guba, T. and Lincolin, D. (2015) *Mixed methods Research Methodologies and Data validation*. Oxford: Berg Publishers.

Hakim, C. (2018) *Research Design: Successful Designs for Social and Economic Research* (2nd edn).London: Routledge.

Harris, J. E. (2020a). *The Subways Seeded the Massive Coronavirus Epidemic in New York City* (Working Paper No. 27021; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w27021

Harris, J. E. (2020b). *Reopening Under COVID-19: What to Watch For* (Working Paper No. 27166; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w27166

Hassan, T. A., Hollander, S., van Lent, L., & Tahoun, A. (2020). *Firm-level Exposure to Epidemic Diseases: Covid-19, SARS, and H1N1* (Working Paper No. 26971; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w26971

He, G., Pan, Y., & Tanaka, T. (2020). COVID-19, City Lockdowns, and Air Pollution: Evidence from China. *MedRxiv*, 2020.03.29.20046649. https://doi.org/10.1101/2020.03.29.20046649

International Labour Organisation. (2020). COVID-19 and the world of work: Impact and policy responses.

International Monetary Fund. (2020a, April). *World Economic Outlook, April 2020: The Great Lockdown*. IMF. https://www.imf.org/en/Publications/WEO/Issues/2020/04/14/weo-april-2020

International Monetary Fund. (2020b, June). *World Economic Outlook Update, June 2020: A Crisis Like No Other, An Uncertain Recovery*. IMF. https://www.imf.org/en/Publications/WEO/Issues/2020/06/24/WEOUpdateJune2020

Ivanov D (2020a) Predicting the impacts of epidemic outbreaks on global supply chains: a simulation-based analysis on the coronavirus outbreak (COVID-19/SARS-CoV-2) case. Transp Res Part E Logist Transp Rev 136:101922. https://doi.org/10.1016/j.tre.2020.101922

Ivanov D (2020b) Viable supply chain model: integrating agility, resilience and sustainability perspectives. Lessons from and thinking beyond the COVID-19 pandemic. Ann Oper res. https://doi.org/10.1007/s10479-020-03640-6

Ivanov D, Dolgui A (2020) Viability of intertwined supply networks: extending the supply chain resilience angles towards survivability. A position paper motivated by COVID-19 outbreak. Int J Prod Res 58:2904–2915. https://doi.org/10.1080/00207543.2020.1750727

Ivanov D, Dolgui A, Sokolov B (2019) The impact of digital technology and industry 4.0 on the ripple effect and supply chain risk analytics. Int J Prod Res 57:829–846

John Hopkins University. (2020a). *New Cases of COVID-19 In World Countries*. Johns Hopkins Coronavirus Resource Center. https://coronavirus.jhu.edu/data/new-cases

John Hopkins University. (2020b, May). *Mortality Analyses*. Johns Hopkins Coronavirus Resource Center. https://coronavirus.jhu.edu/data/mortality

Johnston, R. (2019). Data reliability and validity. *Educational researcher*, 33(7), pp.14-26.

Jonas, O. B. (2013). *Pandemic Risk* (p. 40) [World Development Report 2014 on Risk and Opportunity: Managing Risks for Development]. https://openknowledge.worldbank.org/bitstream/handle/10986/16343/WDR14_bp_Pandemic_Risk_Jonas.pdf?sequence=1&isAllowed=y

Jones, C. J., Philippon, T., & Venkateswaran, V. (2020). *Optimal Mitigation Policies in a Pandemic: Social Distancing and Working from Home* (Working Paper No. 26984; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w26984

Jonung, L., & Roeger, W. (2006). *The macroeconomic effects of a pandemic in Europe: A model-based assessment*. DG ECFIN, European Commission, Brussels. https://ec.europa.eu/economy_finance/publications/pages/publication708_en.pdf

Keogh-Brown, M., McDonald, S., Edmunds, J., Beutels, P., & Smith, R. (2008). *The macroeconomic costs of a global influenza pandemic*. Presented at the 11th Annual Conference on Global Economic Analysis, Helsinki, Finland; Presented at the 11th Annual Conference on Global Economic Analysis, Helsinki, Finland. http://www.gtap.agecon.purdue.edu/resources/res_display.asp?RecordID=2755

Kersley, B., Alpin, C., Forth, J., Bryson, A., Bewley, H., Dix, G. and Oxenbridge, S. (2017). *Inside the Workplace: Findings from the 2015 Workplace Employment Relations Survey*. London: Routledge.

Khan SAR, Sharif A, Golpîra H, Kumar A (2019) A green ideology in Asian emerging economies: from environmental policy and sustainable development. Sustain Dev 27:1063–1075. https://doi.org/10.1002/sd.1958

Khan SAR, Zhang Y, Kumar A, Zavadskas E, Streimikiene D (2020) Measuring the impact of renewable energy, public health expenditure, logistics, and environmental performance on sustainable economic growth. Sustain Dev in press 28:833–843. https://doi.org/10.1002/sd.2034

Kopecky, K. A., & Zha, T. (2020). Impacts of COVID-19: Mitigation Efforts versus Herd Immunity. In *Policy Hub* (No. 2020–3; Policy Hub). Federal Reserve Bank of Atlanta. https://ideas.repec.org/p/fip/a00001/87864.html

Kothari, C. (2014) *Research Methodology*. 2nd Ed. New Delhi: New Age International Ltd.

Krejcie, R. V. and Morgan, D. W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement, 1*(1), pp. 607-610

Kuvaas, B. (2018) ‘An exploration of how the employee–organization relationship affects the linkage between perception of developmental human resource practices and employee outcomes’, *Journal of Management Studies*, Vol. 45, No. 1, pp. 1–25.

Lin, P. Z., & Meissner, C. M. (2020). *A Note on Long-Run Persistence of Public Health Outcomes in Pandemics* (Working Paper No. 27119; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w27119

Liu, L., Moon, H. R., & Schorfheide, F. (2020). *Panel Forecasts of Country-Level Covid-19 Infections* (Working Paper No. 27248; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w27248

Madhav, N., Oppenheim, B., Gallivan, M., Mulembakani, P., Rubin, E., & Wolfe, N. (2017). Pandemics: Risks, Impacts, and Mitigation. In D. T. Jamison, H. Gelband, S. Horton, P. Jha, R. Laxminarayan, C. N. Mock, & R. Nugent (Eds.), *Disease Control Priorities: Improving Health and Reducing Poverty* (3rd ed.). The International Bank for Reconstruction and Development / The World Bank. http://www.ncbi.nlm.nih.gov/books/NBK525302/

Maloney, W. F., & Taskin, T. (2020). *Determinants of Social Distancing and Economic Activity during COVID-19: A Global View* (No. WPS9242; pp. 1–23). The World Bank. http://documents.worldbank.org/curated/en/325021589288466494/Determinants-of-Social-Distancing-and-Economic-Activity-during-COVID-19-A-Global-View

Merriam, S. B. (2012). *Qualitative Research in Practice: Examples for Discussion and Analysis.* San Francisco: Jossey-Bass.

Meyer, H., Kay, E. and French, J. (2015) ‘Split roles in performance appraisal’, *Harvard Business Review*, Vol. 43, No. 1, pp. 123–9.

Millward, N., Stevens, M., Smart, D. and Hawes, W.R. (2016) *Workplace Industrial Relations in Transition*. Aldershot: Dartmouth.

Mintzberg, H. and Waters, J. (2018) *Strategies, deliberate and emergent: Readings in Strategic Management*. Basingstoke: Macmillan Education. pp. 4–19.

Morris, T. and Wood, S. (2015) 'Testing the survey method: continuity and change in British industrial relations', *Work Employment and Society*, Vol. 5, No. 2, pp. 259–82.

Naipaul, V.S. (2018) *A Turn in the South*. London: Penguin.

Noor, K, M. (2017). Case Study: A Strategic Research Methodology, *American Journal of Applied Sciences,* 5 (11), pp.1602-1604

OECD. (2020). *OECD Economic Outlook, Volume 2020 Issue 1: Preliminary version | OECD iLibrary*. https://www.oecd-ilibrary.org/sites/0d1d1e2e-en/index.html?itemId=/content/publication/0d1d1e2e-en

Peters, T. and Waterman, R. (2017) *In Search of Excellence*. New York: Harper & Row.

Qiu, Y., Chen, X., & Shi, W. (2020). *Impacts of Social and Economic Factors on the Transmission of Coronavirus Disease 2019 (COVID-19) in China* (Working Paper 494 [pre.]). GLO Discussion Paper. https://www.econstor.eu/handle/10419/215739

Raimond, P. (2016) *Management Projects.* London: Chapman & Hall.

Rajasekat, S., Philominathan, P. & Chinathi, V. (2018) *Research Methodology, India*: AKGS Art.

Robson, C. (2014) *Real World Research* (2nd ed.). Oxford: Blackwell.

Roser, M., Ritchie, H., Ortiz-Ospina, E., & Hasell, J. (2020). Coronavirus Pandemic (COVID-19). *Our World in Data*. https://ourworldindata.org/coronavirus

Saunders, M., Lewis, P. and Thornhill, A. (2009). *Research Methods for Business Students*. 5th Ed. New York: Pearson Education.

Saunders, M., Lewis, P. and Thornhill, A. (2012). *Research Methods for Business Students*. 6th Ed. New York: Pearson Education.

Saunders, M., Lewis, P. and Thornhill, A. (2016). *Research Methods for Business Students*. 7th Ed. New York: Pearson Education.

Schein, E. (2017). *Process Consultation Revisited: Building the Helping Relationship.* Reading, MA: Addison-Wesley.

Shirley, M. and Sushanta, R.A. (2018). *Enabling Data Reliability, Validity and Response Rate*: Palgrave: Macmillan.

Silverman, D. (2017). *Doing Qualitative Research.* Chicago: Chicago Press.

Silverman, J. D., Hupert, N., & Washburne, A. D. (2020). Using influenza surveillance networks to estimate state-specific prevalence of SARS-CoV-2 in the United States. *Science Translational Medicine*. https://doi.org/10.1126/scitranslmed.abc1126

Simonov, A., Sacher, S. K., Dubé, J.-P. H., & Biswas, S. (2020). *The Persuasive Effect of Fox News: Non-Compliance with Social Distancing During the Covid-19 Pandemic* (Working Paper No. 27237; Working Paper Series). National Bureau of Economic Research. https://doi.org/10.3386/w27237

Smith, H. (2018) *Strategies of Social Research: The Methodological Imagination* (2nd edn). Englewood Cliffs, NJ: Prentice-Hall.

Suddaby, R. (2015) 'From the editors: what grounded theory is not', *Academy of Management Journal*, Vol. 49, No. 4, pp. 633–42.

Tashakkori, A. and Teddlie, C. (eds) (2015). *Handbook of Mixed Methods in Social and Behavioural Research*. Thousand Oaks, CA: Sage.

Tharenou, P., Donohue, R. and Cooper, B. (2018). *Management research methods* (p. 338). New York, NY: Cambridge University Press.

Thomas, C. K. and James R. T. (2015). *Marketing Research: An Applied Approach.* New York: McGraw-Hill.

United Nations Conference on Trade and Development, World Investment Report 2015, 2015.

World Bank. (2020). *Global Economic Prospects*. World Bank. https://openknowledge.worldbank.org/handle/10986/33748

World Economic Forum. (2020, March). *A visual history of pandemics*. World Economic Forum. https://www.weforum.org/agenda/2020/03/a-visual-history-of-pandemics/

Worldometers (2020) COVID-19 Coronavirus Pandemic. Available at https://www.worldometers.info/coronavirus/.

Wright, P. and Boswell, W. (2018). 'Desegregating HRM: A review and synthesis of micro and macro human resource management research', *Journal of Management*, Vol. 28, No. 3, pp. 247–76.

Yasenov, V. I. (2020). *Who Can Work from Home?* (SSRN Scholarly Paper ID 3590895). Social Science Research Network. https://papers.ssrn.com/abstract=3590895

Yin, R.K. (2019). *Case Study Research: Design and Method* (3rd edn). London: Sage.

Zhu, N., Zhang, D., Wang, W., Li, X., Yang, B., Song, J., Zhao, X., Huang, B., Shi, W., Lu, R., Niu, P., Zhan, F., Ma, X., Wang, D., Xu, W., Wu, G., Gao, G. F., Tan, W., & China Novel Coronavirus Investigating and Research Team. (2020). A Novel Coronavirus from Patients with Pneumonia in China, 2019. *The New England Journal of Medicine*, *382*(8), 727–733. https://doi.org/10.1056/NEJMoa2001017

APPENDIX 1: RESEARCH QUESTIONNAIRE FOR SMES AUTHORITIES

Dear Respondent

My name is Lovejoy [STUDENT NUMBER: R1810332]. I am a post graduate student at the University of Zimbabwe, undertaking a Master Degree in Business Administration. In partial fulfilment of my studies, I am supposed to carry out a research. In compliance with this requirement, I have chosen to do a research titled **"Impact of Covid-19 Pandemic on Performance of SMEs in Zimbabwe: Case of SMEs in Harare".**

I kindly ask you to help me with information so that I can complete my dissertation. All the information that you may provide shall be used for academic purposes only and shall be treated with strict confidentiality.

My contact details:

Cell: +263773918706

Email: lovejoy.peter@gmail.com

Instructions/Information

1. Please do not write your name or contact details on this questionnaire.
2. Please respond by ticking [√] the appropriate box (es) where applicable and write in full in the spaces provided where specified.
3. Kindly attempt all questions, there is no right nor wrong answers.

SECTION A: DEMOGRAPHICS AND BACKGROUND INFORMATION

A1. What is your highest level of education?

Master and Doctorate degree	1
Undergraduate degree	2
Diploma	3
Advanced level	4
Ordinary level	5
Other (specify)	6

A2. What is your level of working experience with SMEs?

> 20 years	1
16-20 years	2
11-15 years	3
6-10 years	4
≤ 5 years	5

A3. What position do you occupy within your SME? *Choose only the highest ranking (as defined by your organisation) if you hold more than one positions within your organisation.*

Owner	1
Manager	2
Accountant	3
Supervisor	4
Other	5

If **other**, specify ……

A4. Which industry is your organisation in?

Food	1
Clothing	2
Manufacturing / construction	3
Hospitality	4
Retail	5
Agriculture	6
Transport	7
Electronics	8
Health	9
Education	10
Other	11

If **other**, specify ……

SECTION B: ECONOMIC AND FINANCIAL IMPACT OF COVID-19 ON SMEs

B. To what extent do you agree or disagree with each of the following statements relating to economic and financial impact of Covid-19 on your organisation? Use the given scale/key.

1= Strongly Disagree (SD), 2=Disagree (D), 3=Neutral (N) 4=Agree (A) and 5=Strongly Agree.

Statement		SD	D	N	A	SA
		1	2	3	4	5
B1	Covid-19 has resulted in a significant reduction in our sales volumes					
B2	Covid-19 has resulted in a significant reduction in our profit figures					
B3	Covid-19 has resulted in a significant increase in the cost of doing business for us					
B4	Covid-19 has resulted in a significant shortage of working capital for us (e.g. to finance inventories)					
B5	Covid-19 has resulted in us failing to at least maintain wages and salaries for all our workers					
B6	Covid-19 has resulted in us having reduced access to liquidity and financial credit					
B7	Covid-19 has resulted in us failing to meet fixed and statutory costs, e.g. rent and debt interests and principal repayments obligations					

SECTION C: IMPACT OF COVID-19 ON SUPPLY CHAIN OF SMEs

C. To what extent do you agree or disagree with each of the following statements relating to supply chain impact of Covid-19 on your organisation? Use the given scale/key? 1 = Strongly Disagree (SD), 2=Disagree (D), 3=Neutral (N) 4=Agree (A) and 5=Strongly Agree.

Statement		SD	D	N	A	SA
		1	2	3	4	5
C1	Covid-19 has resulted in a significant reduction in the demand of our 'non-essential' products					
C2	Covid-19 has resulted in a significant increase in the demand of our 'essential' products					
C3	Covid-19 has resulted in significant disruptions in the supply of our materials and products					
C4	Covid-19 has resulted in significant disruptions in the supply of imported materials					
C5	Covid-19 has resulted in significant disruptions in the supply of locally supplied materials					
C6	Recovering after Covid-19 lockdowns has been slowed down by poor supplies of materials					
C7	Recovering after Covid-19 lockdowns has been slowed down by poor supplies of labour					

D. To what extent do you agree or disagree with each of the following statements relating to your SME organisation? Use the given scale (key). 1 = Strongly Disagree (SD), 2=Disagree (D), 3=Neutral (N) 4=Agree (A) and 5=Strongly Agree.

Statement		SD	D	N	A	SA
		1	2	3	4	5
D1	The non-essentiality of our products and services in the eyes of the government has made up more vulnerable to the effect of Covid-19					
D2	The non-essentiality of our products and services in the eyes of the public has made up more vulnerable to the effect of Covid-19					
D3	Financial incapability makes my SME organisation much vulnerable to the effect of Covid-19					
D4	Where my SME organisation is located has made us more susceptible to the impact of Covid-19					
D5	Being labour intensive as an SME has made us more susceptible to the impact of Covid-19					

SECTION E: SUGGESTIONS

E1. How do you think the impact of Covid-19 on SMEs can be reduced in Zimbabwe?

……

……

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……

……

THE END: THANK YOU

APPENDIX 2: INTERVIEW GUIDE FOR SMES AUTHORITIES

Dear Respondent

My name is Lovejoy [STUDENT NUMBER: R1810332]. I am a post graduate student at the University of Zimbabwe, undertaking a Master Degree in Business Administration. In partial fulfilment of my studies, I am supposed to carry out a research. In compliance with this requirement, I have chosen to do a research titled **"Impact of Covid-19 Pandemic on Performance of SMEs in Zimbabwe: Case of SMEs in Harare".** I am kindly asking for your assistance by way of responding to this set of interview questions to the best of your knowledge. Please note that the views that you will provide will be used for academic purposes only and shall be treated with confidentiality.

i. What is your position in this organisation?
ii. What is your level of experience within this organisation and within SMEs?
iii. What has been the Economic and Financial Impact of COVID-19 on your organisation?
iv. What has been the impact of COVID 19 on your organisation's supply chain?
v. What factors do you think make you highly vulnerable to the impact of COVID-19?
vi. What do you suggest can be done to manage the financial impact of COVID-19 on SMEs in Zimbabwe?

THE END: THANK YOU

APPENDIX 3: TURNITIN REPORT RESULTS

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