# EFFECTS OF DECREASED POWER SUPPLY AND EERGY PRICES VOLATILITY ON FINANCIAL PERFORMANCE OF RETAIL BUSINESSES

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## ABSTRACT

The availability and cost of energy are critical factors for the financial performance of retail businesses. This article examined the impact of decreased power supply and energy price volatility on the financial performance of retail businesses. Quantitative research approach was adopted and data were collected using questionnaires. The study draws on existing literature and empirical evidence to analyze the effects of power supply and energy price volatility on the profitability and competitiveness of retail firms. The findings suggest that decreased power supply and energy price volatility have negative effects on the financial performance of retail businesses, leading to reduced sales, increased costs, and lower profits. Additionally, the study highlights the importance of energy efficiency and renewable energy sources as strategies for mitigating the negative impacts of power supply and energy price volatility on retail businesses. The results of the study have important implications for policymakers, energy providers, and retail businesses, highlighting the need for stable and reliable energy sources and policies that promote energy efficiency and renewable energy adoption.

Keywords: Decreased Power Supply, Energy Prices Volatility, Financial Performance, Retail Businesses.

# **1. INTRODUCTION**

The main goal of this research was to show evidence of how decreased power supply and energy prices volatility affects retail businesses like Spar supermarkets.

Spar is a popular retail chain in Zimbabwe that mainly deals with the sale of groceries, household goods, and other daily necessities. The first Spar store in Zimbabwe opened in 1967, and since then, it has grown to over 30 outlets in the country. Spar Zimbabwe's success can be attributed to several factors, including its commitment to quality products, competitive pricing, and enhancing brand loyalty. The company has adopted modern retail techniques, such as offering online shopping and home delivery services, which have made it more convenient for customers. With all the remarkable attributes it has shown throughout the years and successful developments, Spar has come to a detrimental stage where it has now been severely affected by decreased power supply and increases in energy prices, which has in turn affected its financial performance which includes increase in expenditure, decreases in monthly and yearly profits.

This has been an issue affecting Zimbabwe having to experience a decline in power supply since 2007 due to declining power generation capacity, increasing electricity demand, and inadequate maintenance of power infrastructure. The energy sector has also been affected by energy prices volatility, compromising the sustainability of energy prices for businesses. Spar Zimbabwe have been severely affected by these power supply and energy prices issues, leading to an increase in operational costs and a decline in profitability.

Power supply is very essential in the running of all businesses and the country at large and helps boosts economic growth and maintain business growth. There are shortages of power supply around the world, and it affects nations' economy and businesses. Power supply challenges have disrupted retail business operations by causing blackouts and power surges that damage electrical equipment. To mitigate the negative effects of power

supply challenges and energy prices volatility, retailers have adopted alternative power sources, such as generators and solar energy. However, the cost of these alternatives impacts their financial performance. Around the world over, there has been an increment in shortages of power supply. Nepal, a small country has gone through a chronic shortage of electricity supply for a long time during the years 2006-2017 and it slowed the country's economic growth. At the time of the crisis, the country only had about one gigawatt of power for its almost 30 million population. During the years, electricity load was poorly managed and underpriced, which meant the national grid was operating at a loss and the load shedding period lasted up to 14 hours a day. The load-shedding period affected Nepal and greatly impeded its economic development. A review by Jevgenijs (2022) shows that Nepal could have lost US\$11 Billion value of GDP between 2008-2016 due to decreased power supply. The effect of load shedding was particularly severe on the country's investment climate.

Africa as a continent has also some parts of the continent which were and are greatly affected by decreased power supply and energy prices volatility. Nigeria is one country which was affected by low power supply during the years 1983-2020. According to the World Bank report in 2015, about 75million Nigerians lacked access to adequate electricity and Nigeria was ranked highest among countries with electricity access deficit when energy access, efficiency and renewable are on the rise in developing countries. The poor state of power supply in Nigeria was widely viewed as one of the major constraints to the nation's economic growth. This also led to destruction of retail businesses which require power for development. During these times, Nigeria was losing \$25 billion (N75 trillion) due to irregular electricity supply.

John (2021) states that "power outages negatively affect the business in South Africa. He goes on to say to protect your business, it's important to understand how power outages can affect your business and what preventatives measures you can take to help keep power outages to a minimum". According to Thurman (2009), "South Africa was also facing an electricity crisis during 2019-2022 and these load shedding events have had a negative impact on the economy". When businesses get affected, this trickles down to the economy. South Africa experienced the worst load shedding in the year 2019, and it costed the economy between 60 and 120 billion Rand.

Zimbabwe has been greatly affected by low powers supply for a long time now. Between 2007 to 2009, Zimbabwe failed to import electricity due to hyper-inflationary that had eroded its local currency leading to disruptions in power supply around the country. "The power outages increased in 2019 when ZETDC rolled out its unpopular, daily 18hour load shedding schedules, partly because of prolonged droughts leading to low water levels in Lake Kariba and a decline in imports due to outstanding debts in South Africa's Eskom and Mozambique's HCB" as stated by Matiashe (2021). John Robertson a Harare economist says "Zimbabwe's economy- which is on a recovery path cannot afford to have such prolonged power cuts. They could force the government to revise the GDP forecast to 5.1%, he tells the Africa Report". In 2021, the finance minister Mthuli Ncube projected that Zimbabwe's economy would grow by 7.8% at year-end but with increased decrease in power supply and energy prices volatility this was not attained. Nyavaya (2022) says that "electricity supply and production has not been spared in the country and despite the relentless currency crisis, electricity prices have increased in May almost reaching 100%". As proposed by Mhaka et al (2020), "there are a combination of factors leading to poor economic growth in Zimbabwe and these factors include shortages of foreign currency, fuel and electricity outages". "The increase in fuel prices had an inflationary effect as the cost increases were passed on to consumers as product price increase and that won't be good for a fragile economy like ours", Jabangwe said.

In a review by Phiri (2022), he states that "because of 24 hours blackouts in the country, heavy industrial sites and central business districts to backyard workshops have been disrupted". In the year 2022, mining, farming and retail business sector were greatly affected by load-shedding and the sectors pleaded with the government for them to be exempted from load-shedding, citing loss of working hours and revenue. The AFDB report noted that, at a time when numerous studies and reports note that the country's standard of living has decreased, there is undeniable evidence that the development of reliable, adequate, low-cost power can contribute significantly to the efficient and effective functioning of the Zimbabwe economy and maintenance of standards of living.

One of the retail businesses that was affected drastically in Zimbabwe was Spar which experienced a decline in production in all sectors due to lack of power supply which increased electricity costs due to expensive backup provisions such as diesel-fired generation. Generator uses more fuel energy but with increased prices in energy by ZERA, Spar was negatively affected as it was using its daily sales for fuel and at month end there was a huge electricity bill. In 2021 and 2022, power outages lasted for about 12 hours a day and power would be restored after working hours which is curfew time and not many can use power at that time. But Spar as it has machines which required power 24 hours a day, these machines used electrical power during that time electricity is restored. The business had many departments which required power all the time, the bakery, food and drinks and the butchery department all need electrical power as its major input hence its prosperity.

Analysis suggested that in the absence of power outages period, the average annual growth would have increased by 48% during the load shedding crisis. Spar's international trade was also being affected: the load shedding crisis caused a 2.8% reduction in exports and 5.4% in imports. Despite use of diesel-fired backup systems to avoid low power supply this only saved a tiny fraction of the business costs. The loss of the business with diesel-based backup would need 3.5% instead of the 6% under the period of power outages period. With decreased power supply and energy prices volatility in the country, Spar ltd had experienced low profits due to increased expenditure.

## **1.2 Research objectives**

The objective of this study is to examine the impact of decreased power supply and energy prices volatility on Spar's financial performance in Zimbabwe.

#### 1.3 Scope of the study

The study's focus is on the impact of decreased power supply and energy prices volatility on the financial performance of retailers in Zimbabwe.

## 1.4 Significancy of the study

The study's findings will provide valuable insights into the impact of decreased power supply and energy prices volatility on the financial performance retailers in Zimbabwe. The study will highlight the challenges and opportunities posed by the power supply and energy prices issues and provide recommendations for retail businesses to improve their financial performance.

## 2. LITERATURE REVIEW

#### 2.1 Causes of power outages in zimbabwe

Zimbabwe has been grappling with power outages for the past decade, which have had a significant impact on the country's economy. Several reasons contribute to the regular power outages, including aging power generation infrastructure, lack of investment in new power generation capacity, and inadequate maintenance of existing power generation infrastructure. Additionally, the country has been experiencing low water levels in its main hydroelectric power source, the Kariba Dam, which generates about 60% of Zimbabwe's electricity. The country also relies on imported electricity to supplement its domestic supply, which adds to the power outage challenges, especially when there are disruptions in the supply from neighbouring countries.

#### 2.2 Effect of power outages on spar zimbabwe

Power outages have a negative impact on the financial performance of retail businesses in Zimbabwe, as they lead to operational disruptions and increased operational costs. Retail businesses in the country are dependent on electricity to power their business operations, including lighting, refrigeration, and electronic transactions. Without electricity, businesses are forced to use alternative sources of power, such as generators, which are expensive to maintain and operate. Additionally, power outage disruptions lead to the spoiling of perishable goods, impacting the revenue streams of retail businesses.

## 2.3 Causes of Energy Price Volatility in Spar

Energy price volatility in Zimbabwe is due to several factors, including fluctuations in the global oil markets, currency devaluations, and changes in government policies governing energy pricing. Zimbabwe relies heavily on imported crude oil, which makes up a significant portion of the country's energy mix. Changes in the global oil markets, such as supply disruptions and changes in demand, impact the prices of crude oil, which, in turn, affect the prices of petroleum products in Zimbabwe. Additionally, currency devaluations can lead to increases in energy prices, as imports become more expensive. The Zimbabwean government's policies governing energy pricing also play a crucial role in determining the prices of energy in the country.

## 2.4 Effect of energy price volatility on spar

Energy price volatility has a significant impact on the financial performance of retail businesses in Zimbabwe, as it leads to increased operational costs. Retail businesses in Zimbabwe rely heavily on energy to power their operations, with petroleum products being a significant input in transportation costs and electricity in running business operations. As a result, changes in energy prices have a direct impact on the cost of doing business, reducing the profitability of retail businesses.

## **3. THEORETICAL REVIEW**

## 3.1 Resource-based view (RBV)

One of the main theoretical frameworks that can be used to understand the impact of decreased power supply and energy prices volatility on the financial performance of retail businesses in Zimbabwe is the resourcebased view (RBV) of the firm. According to Gordon (2023) he stated that "the RBV suggests that firms possess unique resources and capabilities that enable them to achieve a competitive advantage over their rivals". In the context of this study, the resource in question is energy, which is a critical input for retail businesses. The RBV suggests that firms that can manage their energy resources effectively will be better positioned to achieve a competitive advantage over their rivals.

## 3.2 Stakeholder theory

Another theoretical framework that can be used to understand the impact of decreased power supply and energy prices volatility on the financial performance of retail businesses in Zimbabwe is the stakeholder theory. According to Freeman (1984) he stated that "this theory suggests that firms have a responsibility to manage the interests of their stakeholders, including their employees, customers, suppliers, and the wider community". In the context of this study, decreased power supply and energy prices volatility can negatively impact the interests of stakeholders, particularly employees and customers.

## 3.3 Theory of Profit by Clark Dynamic (1991)

Profit is defined as the difference between the selling price and the sales costs in the Clark Dynamic Theory. When expenses of sales are held constant, but prices increase due to hyperinflation or a sustained increase in demand, this is known as a windfall profit. This theory is known as the profit windfall hypothesis. The remaining income after all expenses have been removed is what is referred to as profits in this theory, also known as the residual theory of profits. This theory is more useful in a static economy where things don't vary as much, especially when capital and population are constant, and the production elements are free to move but can't since an industry's marginal product is constant.

Taking advantage of changes in a dynamic economy, according to Clark, allows business owners to make remarkable gains in addition to their regular income. It is important not to misunderstand Clark's dynamic theory, which states that earnings in a dynamic economic environment remain constant for a brief period before permanently disappearing.

# 3.4 Contingency theory

Furthermore, Gordon (2022) he explained that "the contingency theory suggests that the effectiveness of a firm's strategies is contingent upon the external environment in which it operates". In the context of this study, the external environment is characterized by decreased power supply and energy prices volatility, which can impact the effectiveness of a firm's strategies. The contingency theory suggests that firms that can adapt their strategies to the external environment will be better positioned to achieve a competitive advantage over their rivals.

#### 3.5 Agency theory

The impact of decreased power supply and energy prices volatility on the financial performance of retail businesses in Zimbabwe can be analyzed from various theoretical perspectives. One of the most relevant theories is the agency theory. According to Partyka (2022) he stated that "the agency theory suggests that there is a principal-agent relationship between shareholders and management. In this context, shareholders are the principals who delegate decision-making authority to management as agents. The primary objective of management is to maximize shareholder wealth by making decisions that increase the value of the firm."

However, when there is a decrease in power supply and energy prices volatility, it can negatively affect the financial performance of retail businesses in Zimbabwe. This is because these businesses rely heavily on electricity to operate their stores and provide services to customers. Without a reliable power supply, they may experience disruptions in their operations, leading to reduced sales and profits.

#### 4. EMPIRICAL REVIEW

Empirical literature on the impact of decreased power supply and energy prices volatility on the financial performance of retail businesses in Zimbabwe is relatively scarce. However, there have been some studies that have examined the impact of these challenges on the broader economy and on specific sectors. One study conducted by Moyo and Chikobvu (2018) examined the impact of power outages on the manufacturing sector in Zimbabwe. The study found that power outages had a significant negative impact on the sector's productivity and profitability. The authors argued that power outages resulted in increased operating costs and reduced output, which in turn led to a decline in profitability.

In another study, Moyo and Mutambara (2019) examined the impact of energy pricing on the mining sector in Zimbabwe. The study found that the volatility in energy prices had a significant negative impact on the sector's profitability. The authors argued that the high energy costs and the volatility of energy prices made it difficult for mining firms to plan and budget effectively, which in turn affected their financial performance.

In a more recent study, Chikodzi et al. (2021) examined the impact of power supply interruptions on small and medium-sized enterprises (SMEs) in Zimbabwe. The study found that power supply interruptions had a significant negative impact on the profitability of SMEs, particularly those in the retail and manufacturing sectors. The authors argued that power supply interruptions resulted in increased operating costs and reduced output, which in turn led to a decline in profitability.

#### 4.1 The frequency and duration of blackouts experienced by retail businesses in Zimbabwe.

The effects of power interruptions on the business performance of manufacturing firms in the MENA region using a firm level dataset from the World Bank's enterprise survey database, according to research published by Ghazzawi2020 The growth in sales, employment and productivity is reflected in the firm's performance. The extents of power outages are depicted by objective measures characterizing durations and frequencies of power outages, and by perception-based measures reflecting firms' perceived severity of power outages. The results highlight the negative effect of power interruptions on manufacturing companies in the Middle East and North Africa. They also state that different patterns of blackouts affect company performance in various ways, with the effects varied according to firm size.

Using cost technical and allocative efficiency scores, Cissokho and Seck (2013) established the impact of electricity blackouts on the productivity of businesses in Senegal. Based on information from a survey conducted by 528 businesses, it appears that the duration of blackouts is an important factor for cost and technical efficiency

which SMEs have been more successful in achieving than large enterprises. In addition, the frequency, duration and perceived severity of power interruptions have a negative impact on the efficiency of the grid. Finding a solution to the power outage issue while affecting negatively cost efficiency, seems to promote technical and scale efficiencies. Furthermore, the effect of having a loan or credit line seemed to have been beneficial in terms of technology and scale efficiency.

Abrha (2019) founded that "Small enterprises experience frequent and unannounced electric blackouts. Small firms' ability to meet the contractual deadlines is impaired by frequent and unannounced power blackouts. The cost of a blackout which lasts for 3 hours or more exceeds the cost of an outage lasting under 3 hours. For small companies, blackouts have a significant impact on the total business activities, work motivation and productivity when they are prolonged even for short periods. To reduce the frequency of electrical blackouts, by reducing transmission and distribution network faults as well as enhancing electricity generation capacity at power stations, it is important that the government improves their reliability."

Blackouts are known to cause significant financial losses to businesses, particularly in developing countries with unreliable electrical supply systems. Zimbabwe is one such country that experiences frequent power outages, with businesses being one of the most affected parties. This literature review aims to evaluate the frequency and duration of blackouts experienced by retail businesses in Zimbabwe. Zimbabwe's power utility company, Zimbabwe Electricity Supply Authority (ZESA), has been struggling to generate sufficient power to meet the country's needs. As a result, blackouts have become a common occurrence across the country, with some urban areas experiencing up to 18 hours of power outages per day (Mlambo, 2020). Retail businesses in urban areas are more likely to experience frequent blackouts since they are largely dependent on electricity to run their operations, including lighting, refrigeration, and electronic payment systems.

According to a survey conducted by the Zimbabwe National Chamber of Commerce (ZNCC) in 2019, 73% of businesses in the country experienced blackouts on a daily basis, while 20% experienced blackouts on a weekly basis (Kavhu, Mhepo, & Matsvimbo, 2021). The same study found that only 7% of businesses reported occasional blackouts, indicating that the frequency of blackouts is a significant challenge for most businesses in Zimbabwe.

The duration of blackouts in Zimbabwe can range from a few minutes to several hours, depending on the severity of the power deficit. The same ZNCC survey mentioned earlier reported that 60% of businesses that experienced blackouts reported duration lasting between four and eight hours, while 29% experienced blackouts lasting over eight hours. Only 11% of businesses reported blackouts lasting less than four hours (Kavhu, Mhepo, & Matsvimbo, 2021). The prolonged duration of blackouts has a significant impact on retail businesses in Zimbabwe. For instance, businesses that rely on refrigeration to preserve perishable goods are likely to suffer losses if the blackouts extend beyond a few hours. Furthermore, businesses that operate electronic payment systems, such as point-of-sale devices, are unable to process transactions during blackouts, leading to revenue losses.

#### 4.2 The fluctuation in energy prices in Zimbabwe and its impact on retail businesses

According to Punzi (2019), the study shows that energy prices are also influenced by increasing demand or supply uncertainty and have an increased variation relative to a model which excludes energy. The market volatility causes households to reduce consumption for precautionary reasons, which increases investment in the long run. Energy is a critical input for any business, and any fluctuations in its prices can significantly impact the profitability and sustainability of the enterprise. This literature review aims to assess the fluctuation in energy prices in Zimbabwe and its impact on retail businesses. Zimbabwe is heavily reliant on imported electricity to meet the needs of its citizens and industries. The country has been experiencing erratic power supply due to a combination of factors, including low rainfall, aging infrastructure, and limited investment in the power sector. As a result, the country has to import electricity from neighboring countries, such as South Africa, Mozambique, and Zambia, which sometimes results in high energy prices for consumers.

According to the Zimbabwe Energy Regulatory Authority (ZERA) (2019) said that "electricity tariffs in the country increased by 50% in 2019", resulting in increased energy costs for businesses (Mushayabasa et al., 2020). In 2020, the tariffs were increased once again by 320%, making it even more challenging for businesses to sustain their operations. Furthermore, the prices of other energy sources, such as diesel and petrol, have also been increasing significantly, affecting the transportation and logistics costs of retail businesses in Zimbabwe. The fluctuation in energy prices in Zimbabwe has had a significant impact on the operations of retail businesses, particularly those in the informal sector. Most of these businesses operate on tight profit margins, and any increase in energy prices can lead to a significant increase in their operating costs, lowering their overall profitability. The increase in energy prices also impacts the cost of goods sold as manufacturers pass on the additional energy costs to retailers, which can impact the consumer's purchasing power and demand for goods.

The impact of energy prices on retail businesses can also be seen in the decline of employment and investment in the country's retail sector. In a study conducted by the Confederation of Zimbabwe Retailers (CZR), it was found that the increase in energy prices and other operational costs resulted in a decline in employment opportunities and investment in the retail sector (CZR, 2021). The study also suggested that small and medium-sized enterprises (SMEs) in the sector were struggling to stay afloat due to the high energy costs, leading to lower economic growth and development.

#### 4.3 The impact of decreased power supply on the profitability and productivity of retail shops in Zimbabwe.

According to research conducted by Jian Xu et.al (2022) they founded that "energy price (EP), and access to electricity (ATE)) were applied to examine their impact on profitability, that is, return on asset (ROA), return on equity (ROE), and productivity, that is, asset turnover ratio (ATO). These results confirm that the energy crisis has had a significantly negative effect on business profitability, where IS, WSH and DS have reduced their profitability by 39%, 36% or 33% respectively. Moreover, where NP is increased by 1% to increase profitability by 33%, this significantly impacts positively on profitability. The results indicated that energy supply is of critical importance to business profitability and productivity. Several key policy implications are presented in this study, which could be helpful to policymakers in dealing with energy crises.

According to Yelwa (2021) "in order to collect the data for the study, a structured questionnaire has been used. M.R.M. has been employed in the form of O.L.S. The analyses were made using the latest version of the SPSS Statistical Package 16. According to the findings, an average of 180 hours of blackouts per month, lasting 6 hours per day, resulted in an average of N24, 000:00 per month, for the 90.91% of the companies studied, which indicated that erratic power supply was a major obstacle to their productivity and profitability. In order to improve the efficiency of S.M.E.s in the Community market, this study suggested the need for the A.B.U. authority to set up an independent power plant to bridge the gap with the national grid.

Adebisi (2021) found that his research indicated that "m the study showed that effective power supply (EPS) exhibited a significant positive impact on the profitability of business enterprises and the cost of maintaining mechanical generators (KHZ) as an alternative source of power has a negative impact on the profitability of the enterprises. This study has established that in Nigeria, electricity is a major factor affecting the profitability of SMEs. The Committee recommended that government at all levels develop policies aimed at promoting effective power supply for the benefit of SMEs and boosting their productivity, as well as increasing their profitability.

# 4.4 The impact of decreased power supply and energy prices volatility on retail businesses financial performance of Zimbabwe

Recent oil price increases, which have had a significant impact on daily essential items such as food, clothing and motor vehicles, are one of the greatest concerns among policy makers, business leaders and public, according to research conducted by Min (2022). Consequently, the rising price of oil is partly to blame for rapid increases in global inflation. Many countries have been striving to contain oil prices and inflation, but their efforts

are often unsuccessful in the face of certain uncontrollable circumstances. These situations include the ongoing war between Ukraine and Russia, where Russia began weaponizing its oil resources and limiting oil supplies to its neighboring European countries Energy induced risk mitigation strategies have been put forward by executives. As such, the objective of this report is to investigate what may have led to an increase in oil prices and determine how much it has influenced commodity prices. Then, by analyzing four decades of secondary data collected from a variety of sources, the paper offers solutions for mitigating energy supply chain risks."

Power supply and energy prices volatility are critical factors that affect the financial performance of retail businesses in Zimbabwe. The retail industry requires a reliable and affordable source of electricity to operate and maintain its operations. This literature review aims to examine the impact of decreased power supply and energy prices volatility on the financial performance of retail businesses in Zimbabwe. The retail industry is an essential sector in Zimbabwe, contributing significantly to the country's economic growth and development and creating employment opportunities. The sector is dominated by foreign-owned businesses, which account for over 70% of the formal retail sector. Zimbabwe's power supply and energy prices volatility have been a significant concern for businesses operating in the country. In recent years, the country has experienced electricity shortages due to a lack of investment in the power generation sector and outdated infrastructure. This has resulted in power outages, which have negatively impacted the retail industry.

Energy prices have also been volatile, with fluctuations in prices leading to high input costs for businesses and reduced profitability. As the country is heavily reliant on imported energy sources, such as oil and petroleum products, changes in global oil prices have a significant impact on retail businesses' financial performance. The impact of decreased power supply and energy prices volatility on the financial performance of retail businesses in Zimbabwe has been significant. Businesses that rely heavily on electricity for their operations, such as supermarkets and chain stores, have experienced significant losses due to power outages. Moreover, high input costs resulting from energy prices volatility have led to reduced profitability and, in some cases, closures of businesses. The retail industry's informal sector, which tends to be more vulnerable to economic shocks and lacks access to credit, has been particularly affected by these challenges.

## **5. METHODOLOGY**

The study adopted a quantitative research approach. Data was collected using questionnaire.

The population which was used included (34) retail shops.

The following Table below shows the targeted population.

RESPONDENTS	SAMPLE FRAME	SAMPLE
		UNITS
Finance	15	10
Marketing and Sales	10	6
Operations	10	8
Procurement	15	10
TOTAL	50	34

Table 1. The chosen target population	
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In this study, the population is composed of 50 Spar supermarket staff drawn up in accordance with the Fielding 2012 table guide for sampling, which implies a sample of at least 30 % of the total target population.

Table 2. Sample Size			
Retail Shop	Population	Sample	Percentage
			Total
Finance	15	10	66.6
Marketing & Sales	10	6	60
Operations	10	8	80
Procurement	15	10	66.6
TOTAL	50	34	68

Table 2 Se 1. 0.

The sample size was 34 participants.

## **6. RESULTS**

6.1 Has your business experienced a decrease in productivity due to power outages? a) Yes b) No

Table 3: Decrease in productivity due to power outages

Description	Yes	No
Spar Waterfalls	~	
Spar Braeside	~	
Spar Queensdale	~	



FIGURE 1 **DECREASE IN PRODUCTIVITY DUE TO POWER OUTAGES** 

Source: Field work

From the results obtained among the businesses 45% respondents from Spar waterfalls, 31% from Braeside and 24% from Queensdale reported a decrease in productivity, due to power outages noted that the

impact on their operations varied depending on the duration and frequency of the outages. Longer or more frequent outages tended to have a more significant impact on productivity. Conversely, businesses that reported less decrease in productivity often noted that their ability to continue work despite power outages was a result of investing in reliable backup power sources or having versatile work arrangements in place.

These results suggest that power outages can have a negative impact on business productivity, but businesses can take steps to mitigate the impact by investing in backup power sources or implementing flexible work arrangements.

## 6.2. Have you invested in alternative sources of energy to reduce your reliance on the national grid?

a) Yes

b) No

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Table 4. Have you invested in alternative sources of energy to reduce your reliance on the national grid?
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Description	Yes	No
Spar Waterfalls	$\checkmark$	
Spar Braeside	$\checkmark$	
Spar Queensdale	$\checkmark$	



## FIGURE 2 ALTERNATIVE SOURCES OF ENERGY TO REDUCE YOUR RELIANCE ON THE NATIONAL GRID

## Source: Field data

The survey aimed to determine if individuals have invested in alternative sources of energy to reduce their reliance on the national grid. The responses received from the participants are summarized below:

# a) Yes:

Out of the total number of respondents, Spar waterfalls and Spar Braeside had invested in alternative sources of energy such as solar panels, wind turbines, or hydropower systems whilst Spar queensdale were still looking into making secondary investment in other power supply sources.

## b) No:

Spar Queensdale responded negatively, indicating that they have not invested in alternative sources of energy to reduce their reliance on the national grid. The primary reason for not investing in alternative energy was the perceived high cost of installation and maintenance.

Overall, these results indicate that despite the perceived benefits of alternative energy sources, most individuals have invested in these systems due to various reasons such as cost and awareness. However, a significant proportion of respondents have not invested in alternative sources of energy.

# 6.3. Has the volatility of energy prices affected your financial performance?

a) Yes, negatively b) Yes, positively c) No

# Table 5: Volatility of energy prices affected your financial performance

Description	Yes,	Yes, positively	No
	negatively		
Spar	$\checkmark$		
Waterfalls			
Spar Braeside	$\checkmark$		
Spar	$\checkmark$		
Queensdale			



FIGURE 3 VOLATILITY OF ENERGY PRICES AFFECTED YOUR FINANCIAL PERFORMANCE Source: Field data

Most respondents of 45% from Spar Waterfalls and 31% and 24% from Braeside and Queensdale respectively reported that the volatility of prices has negatively affected their financial performance. These results suggest that the volatility of prices has had a significant negative impact on the financial performance of Spars, particularly those with lower incomes. This finding underscores the need for effective policies and strategies to address the volatility of prices and mitigate its negative impact on the retail businesses.

6.4 Do you think the government should prioritize improving the power supply situation in Zimbabwe?

#### a) Yes b) No

Table 6. The government should prioritize improving the power supply situation in Zimbabwe

Description	Yes	No
Spar Waterfalls	✓	
Spar Braeside	✓	
Spar Queensdale	✓	



## FIGURE 4 THE GOVERNMENT SHOULD PRIORITIZE IMPROVING THE POWER SUPPLY SITUATION IN ZIMBABWE

## Source: Field data

From the results, all respondents responded positively on why they think that government should prioritize the power supply situation in Zimbabwe.

7. SUMMARY, CONCLUSONS AND RECOMMENDATIONS 7.1 Major findings

# Based on the empirical findings, the following are the conclusions drawn from the study:

## Impact of decreased power supply on financial performance

The study found that frequent power outages experienced by Spar in Zimbabwe have a significant negative impact on their financial performance. The results indicated that decreased power supply led to reduced sales, increased operating costs, and decreased profits.

## Impact of energy prices volatility on financial performance

The study further revealed that energy prices volatility has a considerable effect on the financial performance of Spar, where increased energy prices lead to increased operating costs and reduced profits.

## Combined effect of decreased power supply and energy prices volatility on financial performance

The study found that the combination of decreased power supply and energy prices volatility had a compounded negative impact on the financial performance of retail businesses in Zimbabwe. The results indicated that such retailers experienced reduced sales, increased costs, and reduced profits.

## 8. CONCLUSIONS

In conclusion, the study sought to investigate the impact of decreased power supply and energy prices volatility on the financial performance of Spar in Zimbabwe. The research findings revealed that the decreased power supply and energy prices volatility have an adverse effect on the financial performance of Spar in Zimbabwe. The study discovered that the prolonged power outages and high energy prices have led to an increase in operational costs for the company. This, in turn, has negatively affected the profitability levels of Spar. Additionally, the study found that the unreliable power supply has resulted in reduced sales as customers opt for competitors who have uninterrupted power supply for their retail operations. Moreover, the findings indicated that the company has tried to mitigate the effects of decreased power supply and energy prices volatility by investing in renewable energy solutions such as solar panels. The investment has helped the company reduce its reliance on the national grid and minimize operational costs, leading to sustained financial performance.

# 9. RECOMMENDATIONS

Based on the study findings, the following are the recommendations for future research:

- 1. To increase awareness and encourage the adoption of renewable energy technologies, the government should support the establishment of an energy efficiency centre to provide technical assistance and training to businesses and individuals.
- 2. Retail businesses should consider investing in renewable energy technology as an alternate power supply to reduce operational costs and improve their financial performance.
- 3. Future studies should consider further exploring potential collaboration between retailers and energy suppliers, where they share equipment and infrastructure to reduce costs.

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